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Super value CD-ROM and Squirrel pack ... p6

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10 disks of objects for last month's cover disk ... p7

Amiga i-glasses

The virtual 3D headset from Escom ... p6

February 1991

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CU AMIGA MAGAZINE • FEBRUARY 1996

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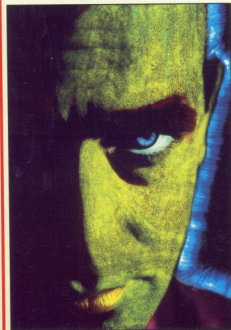
You can create a killer system simply by linking up your Amiga to an older one, that of a friend or a brand new 'slave' machine. Share resources, multiply your processing power and communicate with other platforms. This feature deals with serial, parallel, AmiLink and Ethernet networks, and what you can do with music and games. The rest is up to you ...

'net wedding 38

Mat goes to a wedding in his y-fronts! Help!

PAWS 34

The portable Amiga of the future?



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PREVIEWS

• Damage 43

An ultra violent game from Finland. Kill passers by and then murder the police, all in the name of ... fun?

• Capital Punishment 43

New Canadian company Click Boom attempt to produce the best Amiga beat 'em up ever.

REVIEWS

• Breathless 46

Beautiful, stunning, wow. The Amiga graphic equivalent of a visit by Claude Schiffer.

• Speris Legacy 50

The game that almost got away. Team 17 finally get their act together and publish this Zelda clone.

• Hillsea Lido 53

Poor man's Theme Park, or top English seaside resort hilarity? Vulcan Software's latest release.

• Pinball Prelude 54

Have Elfigy really beaten 21st Century at their own game?

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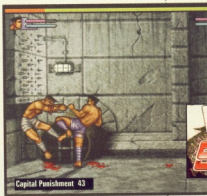
PLAYERS GUIDES

• Vampyra 58

"Fangs a lot for all your questions" says Vampyra as she answers this month's Monkey Island question.

• Snip Tips 59

Hot tips from the world of games. This month's selection highlights a top tip for Fears.



Cover Disks



Texture Studio 8

Plus Extras!
Create fascinating textures for use with Imagine and other graphics packages with *Texture Studio*. We've also got loads of extra goodies for you, including an echo tool, a real-time 3D video titler, more *Imagine* objects, code for *Amiga E*, a fractal graphics generator and a variety of networking software. Is that value or what?

XTreme Racing 13

This month's disk features a top fun racing game from Siltunna and Black Magic. The full game will be reviewed next month, but in the meantime enjoy this superb demo. Also on disk 127 is a selection of networking tools.

Get Serious



REVIEWS

- **DiskMAGIC** 62
We've had file managers before, but have you ever seen one as good looking as this? DiskMAGIC is hot!
- **HiSoft CD-ROM** 65
There's a new CD-ROM on the block, and this one just loves to transfer audio CD data straight over to your Amiga!
- **Virtual i-glasses** 69
Escom have secured the distribution rights for these exciting virtual reality 3D glasses. The next big thing perhaps?
- **GP Fax** 70
In the old days people used to send faxes by scanning pages into slow fax machines. With GP Fax you can do it from your Amiga!
- **OctaMED CD** 74
The Amiga's favourite music software is now available on CD-ROM, along with plenty of samples and modules to play with.
- **Imagine Objects** 76
How do you fancy a set of dinosaur and insect objects, complete with bone structures and the works?



● HD Disk Drive 79

While the rest of the world has high density disk drives, the Amiga comes with a half-capacity DD drive. Could this be the answer?

CD-ROMS

- **CD-ROM Round up** 80
Under the laser this month we have a treat for UFO fanatics, the latest in the Amint series and a new graphics clipart collection.



Public Domain

- **PD Scene** 82
If your budgets are running low after the festive season, take your pick from the many cheap thrills from the public domain.
- **PD Utilities** 87
Likewise, there's plenty of cash-saving software in the PD Utilities section this month.



News

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Silica rescued, a French Amiga show report and Stateside.



Imagine 3.0

Helping you get to grips with this amazingly powerful 3D graphics package, John Kennedy explains the essentials.

AudioMaster IV

As our AudioMaster IV series draws to a close, Tony Horgan ties up the loose ends and offers a few more top tips.

OctaMED 5.04

Just in case you didn't already know *OctaMED* back to front, here's Ed Wiles with the latest in his tutorial series.

PageStream 2.2

Importing and handling graphics is the subject of the final part of Larry Hickmott's *PageStream* DTP tutorials.

Amiga E

The continuing saga of the project to create a text finding tool continues in epilogue fashion, courtesy of Jason Hulanec.

Graphics Masterclass

As yet another series draws to a close to make way for a brand new one, Peter Lee discovers various handy painting tips.

Wired World

Netiquette and smileys are very important if you don't want to be misunderstood on the Net. Mat Bettinson spills the beans.

Frequently Asked Questions

Multimedia: what is it, how does it work, and how come the Amiga is so good at it?

Q+A Masterclass

Is your hard drive full of old backup files? John Kennedy has an *ARexx* script to banish them and free up stacks of space.

Questions and Answers

Mat and Tony are on hand to answer all your technical queries and get your Amiga back up in perfect working order.

Backchat

Backchat is your chance to let the world know just what you think of it. Go on, get it off your chest.

Points of View

Editor Alan Dykes gets up on his soapbox to complain about the way software publishers treat the Amiga.

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Editorial**I had a long chat**

Anderson, General Manager of Amiga Technologies this month. He was very enthusiastic about the future and although reluctant to release for publication too many details for the time being, he had some very interesting things to say about what's planned next year. He was still confident

about Christmas sales, though he admitted that the early problems with disk drives (now solved) may have cast a shadow on events. What's encouraging however is their commitment to CD-ROM, the Internet, hard drives and new technology. Many were worried that the Amiga would be resurrected only to be the poor brother of Escom's PCs, but by all accounts the staff and management of Amiga Technologies are working towards something bigger than this.

The biggest issue that still has to be resolved though is the question of software support, and that is the subject of my Points Of View on page 122, plus with February approaching and romance in the air, Mat Bettinson surfs right into an Internet wedding on page 38. In the games section the spotlight is on *Breathless* and *Spens Legacy* and Tony Horgan is much impressed by HiSoft's CD-ROM pack. Enjoy.

Alan Dykes, Editor

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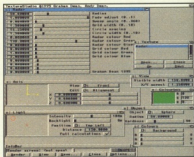
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PIK '95

Wonderfully realistic textures for Imagine and other uses are simple to create with the amazing Texture Studio.

Last month's revolutionary cover mounted rendering software *Imagine 3.0* sports some amazing features not found in any other 3D software. Readers getting to grips with the package will no doubt be familiar with the amazing power of the 'procedural texture modules'. These are mathematically generated textures that can be wrapped around your 3D objects to give the impression of highly realistic surfaces. Unlike conventional bitmapped textures, these will not pixelate when viewed in close-up and use very little memory. They can be infinitely varied, and they look best when rendered at high resolutions.

However, it can require many preview test renders in *Imagine* to get a perfect settings for the textures. This is where *Texture Studio* steps in. *Texture Studio* will load any *Imagine 3.0* texture module, allowing you to change all of the settings and then generate quick test renders to show you the results. You can set the size of



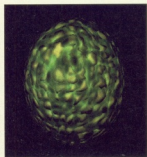
▲ Texture Studio uses a system of multiple windows to display its various controls. Each window can be placed wherever you like.

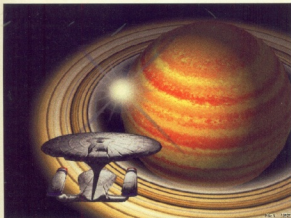
these test images to suit the speed of your machine, which means that you can quickly build up a library of your own textures without spending hours in *Imagine*. The settings can then be saved out as *Imagine* texture settings files which can be loaded onto any object from within *Imagine* itself.

Even if 3D rendering isn't quite your cup of Minestrone soup, it's possible to use *Texture Studio* to generate amazing looking images for a variety of uses such as backdrops for video work. Users of rendering packages other than *Imagine* can use the 'test render' bitmaps as 'brush maps'.

FPU required

Using these types of mathematically defined textures requires a lot of special highly accurate calculations. This is why *Texture Studio* needs a math co-processor, otherwise known as an FPU or Floating Point Unit. Either a 68881 or a 68882 is suitable though it also requires a 68020 processor or above. Anyone at all interested in rendering should seriously consider obtaining these basic requirements if they don't have them



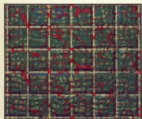


▲ **Gaz Giant**, one of the texture settings included with *Imagine* from last month's cover disk is excellent for rendering realistic looking planets, as you can see from this picture.

already. After installing *Texture Studio*, all that's needed to run the package is a simple double-click on the *Texture Studio* icon. A new Hi Res Interfaced screen is opened with numerous highly technical looking windows dotted around the screen. Fortunately all of this is configurable in *Texture Studio* so our first stop will be changing the set-up to something which is a little more comfortable.

No flicker

The Screen Mode requester can be found in the Project menu. Click on the desired screen mode (try PAL-High Res) and select eight colours or so. *Texture Studio* uses a powerful and highly configurable controlling method. Most of the windows are already open on the *Texture Studio* screen but they can be closed and moved around the screen as you see fit. Windows can be closed with the normal close buttons on the top left corners, while the Windows menu is used to open them up again. Once you've arranged the screen as you like, use the Save Prefs option from the Prefs window - this will ensure that everything pops up like this next time you load. Quickly you'll discover which windows need to stay open all the time and which ones only need to be displayed when needed.



Select Open Texture from the Project menu. A file requester will appear which will home in on the directory containing four new texture files that come with *Texture Studio*. Select 'Radar.txt'. The file post fix '.txt' is a convention for *Imagine* texture modules as is '.atr' which signifies attribute files. Once selected, the main window with all the sliders should suddenly change to display a large number of settings. At the bottom right of the screen is a window called InfoBar. We recommend you leave this at the bottom of the screen at all times. Click on Render. A new screen will be opened and a preview of the texture will be rendered before your eyes.

Moving sliders

Click on any of the Radar colour sliders. Move the sliders and you'll see that the window marked ColourBox will show exactly what the colour looks like. Also change the grid colours. Press Render again and you'll see that those changes have affected the texture. Fortunately all texture modules contain the descriptions of the settings so it's just a question of loading them up and experimenting with the sliders to see exactly what is affected.

Increase the circle width setting and render that. The circle in the radar target will become wider accordingly. Now you're getting the idea. In the top right is a window called Texture. Click on Radar and then the Close button. It will disappear and we're ready to load the next texture, only this time we'll go for one of the more complex ones supplied with *Imagine 3.0*. For this part you'll need to have installed *Imagine 3* from last month's cover disks. Pressing the Open gadget

on this window does the same as Open texture. This time move the file requester directory to the location of the Textures drawer in your *Imagine 3.0* directory. Select BathTile.txt.

Before rendering, cycle the Object gadget in the Object window to read Plane instead of Sphere. Now click on the X slider in the access window. This controls which 3D position the texture will be mapped onto the object. Change it to read -90 degrees. You'll see the 3D arrow representation revolve as you drag the slider. Render it: neat but boring, it needs that something extra.

Click on the Colours window. Change the object colour to dark green for example. Now click on the Open gadget on the Texture window again. Don't close BathTile. Select WormVein.txt. Now you have two textures in *Texture Studio*. If you click on a texture in the texture window, the main settings window will change to the settings for that texture. In this way *Texture Studio* will allow you to render many textures at the same time, although this will slow down rendering speed somewhat. The results, however, are absolutely amazing. Render the WormVein and BathTile combination. Wow, it's a worm-veined tiled wall. Wouldn't that make a nice texture map for a 3D game?

24-bit output

Now let's see what we can do with the output. Click on the options gadget in the InfoBar window. There are two separate sections, one for rendering to the screen, as we have been doing so far, and one selection to render to a file. This time we'll render to a file. This means that we won't get to see the render until it's loaded into a picture viewer program, but it saves on memory. Click on the File tick box to select this render

mode. Click on Choose to pick a location to save the file. Call it Test.IFF or something. Unselect the Render to Screen tick box and bump up the resolution numbers in the boxes to something like 250 x 250. Note that the X/Y aspect box in the View window should be changed to reflect the aspect ratio. If you picked 320 x 200, you'd put 320 divided by 200 in the box EG: 1.6. This ensures the result will not look fat or squashed etc. Then again, you might desire that effect.

Rendering now will take a little time as *Texture Studio* outputs a rather large 24-bit IFF. You can use a third party PD viewer such as VT or PPSHOW to have a look at the result which will be far better than the real time HAM preview. Alternatively load it into a paint package. Most will reduce the colours to 256 or less but it'll pick the best combination and you'll see exactly what *Texture Studio* is capable of. Why not use a paint package to reduce the colours down to 256 or less and load it in as a Workbench backdrop?

Saving settings

Finally when you're sure the preview you're seeing is what you want to use in *Imagine*, save the texture settings out after filling in a descriptive filename. When in the *Imagine* detail editor, 'pick select' a loaded object. Choose Attributes from the Functions menu and then click on the Load gadget at the bottom left. Select your saved out texture settings from *Texture Studio* and it's all done! Don't forget to save the object again with all the textures assigned to it. Render your scene and you should see your object textured just as the preview was in *Texture Studio*, providing your scene is lit correctly. For more details on using *Imagine*, be sure to follow the *Imagine* tutorial in the Workshop section at the back of the magazine. Enjoy! ■

Repetitive brushmaps

Check out the pre-saved texture settings that come with the *Texture Studio*. Eyeball is an excellent example. This is a combination of a number of textures, all of which must be in the same directory, so copy the four textures from the *Texture Studio* drawer in the *Imagine* Textures drawer. When you've got a result that looks about right, don't forget to have a play with the Light Window. Just drag around the circle which is the light source for the test render. A larger number in the Distance box makes the light source look further away. You can also change the intensity. Lowering it to 0% and raising the back light-lighting level will give a perfectly evenly lit render, useful for repetitive brushmaps.



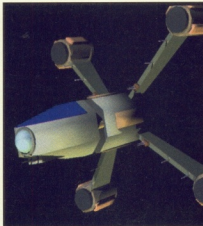
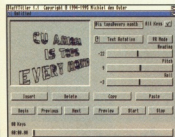
Cover disk goodies

There's something for everyone on our cover disks this month: video titling, sound processing, fractal graphics, Imagine Objects, networking software and example code for Amiga E. See page 16 for loading instructions.

Bluff Titler Demo

Bluff Titler is a clever 3D video titling tool that's incredibly easy to use. It generates animated 3D titles in realtime with minimum effort from the user.

This is a demo version, hence the permanent text on the background. Check the docs for details on registering for the full version. To enter your own titles, type some text into the gadget at the top right of the window. Now adjust the position and rotation of the text with the cycle gadget and sliders beneath this. Click on Insert to mark this as one of the key frame positions. Now move the slider at the bottom of the screen to the right (say half way along). Now alter the position of the text again and click Insert. Do this as many times as you like, then click on Start to see the results. Read the documents for full instructions. *Bluff Titler* requires a 68020 or higher processor.



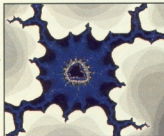
Imagine Objects

Another seven objects for *Imagine* are included on the disk. These should be installed directly to or copied to your *Imagine* Objects drawer. Use them as you would any other *Imagine* object. You'll find both spaceship and the airport tower along with a few others ready to load into *Imagine* to kickstart your new 3D rendering career. Good Luck!



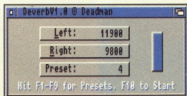
Mandel 92

We've all seen fractal graphics before but there's still something fascinating about them. *Mandel 92* is a tiny little program that draws a basic mandelbrot set and allows you to explore any part of it, zooming in into infinity! The graphics are rendered in progressive steps, from chunky to high resolution. At any time you can click the left mouse button, then drag out an area to explore. Press space and the screen will be redrawn accordingly. Carry on for as long as you like. Flip screens as usual with Left Amiga M, and quit with Right Amiga Q. Use a screen grabber such as *ScreenX* or *Quickgrab* to save the fractal graphics for later use.



DVerb 1.0

DVerb is a neat little tool that adds reverb and echo effects to an incoming audio signal. You'll need the *reqtools.library* installed in your *LIBS* drawer. If you don't already have it, *reqtools.library* is available from the *Aminet* and other PD sources. You'll also need a sampler cartridge plugged into the parallel port. Use the functions keys to select different settings, and press F10 to activate the effect. Connect the Amiga's audio output to a good hi-fi or stereo system for best results.



Amiga E Code

Source code for parts one and two of our *Amiga E* tutorial can be found on the disk.

Networking Software

This month's networking software was included at the last minute before going to press so there's no front-end to unarchive it for you. On the *XTR* game demo CU 127 disk, there's a directory called *NetWorking*. Inside is a text file which you should read which tells you how to unarchive the *NetWorking* software. Included is *ParNFS*, *ProNet* and the *MagPLIP SANA-II* driver. ■

DATAFLYER SCSI+

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DISK 125

XTreme Racing



Demo for
A1200 &
A4000

If totally mad, fast paced racing is your preference then XTreme could be the one for you. With options galore it's speedy but not greedy.



XTreme Racing is a bit like *Skidmarks* or *Roadkill* close up, and very like that old Nintendo SNES gem, *Mario Kart*. Like every other racing game in history the object is to make it to the finishing post first, but it's the amount of competition and fun involved in doing so that make *XTreme* stand out.

XTreme won't let you change any of the graphics settings (except pixel definition) on a standard, unexpanded A1200 because it has your best interests at heart: a jerky, slow racing game is no use to anyone! So either upgrade or stop complaining.

Split screen

Although there will be a serial link option available in the finished product, it has been disabled in this demo. Fear not though, there is a split screen two player mode which is a right old laugh. You can use one or two button joysticks, a CD32 controller or the keyboard to control the game. When in two player mode it's wise to enter the options screen and adjust the viewing angle and horizon so that you can see both cars properly (see box out).

It's not the most serious game in the world. Apart from the obvious goal of reaching the end by being the best driver, you can also achieve this by being a complete cad. Question marks are littered at various points on the track and driving over these will pick up a random icon. This can be amongst others a bomb, a mine, a crazy turbo boost or a power jump. To use these you just have to press fire at the right moment.

There is only one track, but there are three difficulty levels: Three Wheeler, 2.0 Fuel Injection and Turbo Nutter. Some advice: avoid the tree, avoid sliding into the slush and, fun as it may be, try not to hit the ageing elves running across the road too often, they slow you down no end. And we hope you like Jungle, 'cos that's all the music you're going to get!

1x1 resolution

There are several graphics modes which *XTreme* will conform to, including 2x2, 1x2, 2x1 and 1x1 pixels. It can have dithering on or off, it all depends on the type of Amiga you have. While loading, *XTreme* will check out your system and optimise the graphics settings for it, though you can go in and alter them during the game.

It's a self booting disk so all you have to do to load it is insert it in the internal drive and restart your Amiga. It can also be accessed from Workbench, but because it needs nearly 2Mb of RAM, you will need extra RAM to start it from Workbench.

To get speed and frame rate up to scratch you will only be able to play it with dithering on a standard A1200, but it still looks very good, if a little too much like *Virtual Karting* for some people in this office. For an even sharper picture you should try changing the pixel resolution (see box out).

If you have an accelerator the game will automatically default to 2x2 pixel dithered graphics with 020/030 or 04/060 routines and if you have a fast accelerator you can enhance it further by reducing this to full 1x1 pixel resolution for the best results. But remember,



Options, options ... what to do?

Sillitunna seem obsessed with options. So here's a quick tour of what's available. First, when you load the game, you will see a menu screen, this will have three selectable options:

MAIN OPTIONS This actually starts the demo, allowing you to select a one or two player game along the way.
SETUP OPTIONS Should be entered if you are going to use a two button joystick, keyboard or CD32 controller. You can also switch sound effects on or off.
QUIT Quits to Workbench.

As soon as you start the game if you press the ESC button you will enter another menu screen. Choosing main options here will bring up Screen options 1, 2 and 3. The first allows you to adjust the camera angle and horizon, the frame rate and processor routines. The second gives you control over pixel and screen height and width. The third allows you to turn backgrounds, dust and dithering on or off.

Finally there are camera options which allow you to change views etc. Experimentation is in order.



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The Fabulous Squirrel Surf Packs



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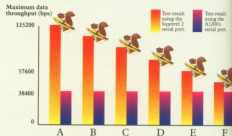
Surfing Starter Pack

- ★ V32 Modem, capable of speeds up to 14,400 bps.
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- ★ Simple installation.

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How much faster is the Surf Squirrel?



Bars A,B and C are the maximum transfer rates obtained when downloading an ASCII Database and Graphics file respectively, using a V34/V32C modem. Bars D,E and F are the maximum transfer rates obtained when downloading an ASCII Database and Graphics file respectively, using a V32B modem.

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Shipping is £4 (3-4 day service) or £6 for Guaranteed Next Day (if goods in stock). Please call our freephone number 0800 223660 for more details or to order any title. EEOE.

Note that the original Squirrel interface (as opposed to the Surf Squirrel) does not include a fax

Cinema4D™

Bringing you closer
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HiSoft Systems is proud to present Cinema4D - a new world of Amiga ray-tracing. Cinema4D is packed with power-user features that will satisfy even the most demanding users. Moreover, at £199 inc., Cinema4D does not carry a power-user price tag.

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only
£49.95

If music be your food of love then play on with the new Music Master Pack from HiSoft Systems. Here is everything you need to experiment with sound, or control your favourite MIDI keyboard, or sample the latest dance sound (or the dog barking next door) or even sequence a complete song, all from the keys of your favourite computer. The Music Master Pack contains:

Aura 8 Sampler

- ★ 8-bit direct-to-disk sound sampler plugs into your parallel port.
- ★ Complete with extensive editing software.
- ★ Vast range of special effects (both to sample & real-time) like flange, echo, tube, etc.

Aura Midi

- ★ Full MIDI interface with MIDI-in, MIDI-out and MIDI-thru.
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- ★ Complete MIDI sequencer. Accurate real-time recording and playback of MIDI instruments.
- ★ Work with up to 32 tracks with 4 channel sample replay.
- ★ Step editor screen for individual note editing and much more.

The Dream Database Twist 2



a screenshot of the fabulous Twist 2 Database

Twist 2, from HiSoft Systems, is the highly-acclaimed relational database for all WB2 Amigas (2Mb memory recommended). With a built-in Forms Designer, a beautiful user interface, simple-to-use relations, versatile sorting, reporting and searching features and speed that defies belief, Twist 2 is the only Amiga database that will grow with you.

Twist 2 is compatible with all Amiga running WB2 (or higher) and with 2MB, or more, of free RAM. A hard disk is recommended. Only £99.95.

Classic Squirrel

The original mould-breaking Squirrel SCSI interface is still available at the magical price of only £69.95. This interface is ideal for those who want to expand their Amiga fully but do not intend to surf the net. You should also note that we have a wide range of SCSI and IDE hard drives for your A1200.

Coming Soon...

Squirrel MPEG



The SCSI MPEG Player for your Amiga. Atari, Macintosh & IBM-PC Compatible

Bring the cinema into your home and onto your computer with the Squirrel MPEG decoder. Playing the popular VideoCD and CDI CD-ROMs, Squirrel MPEG brings high quality digitally-mastered images and 16-bit stereo sound to you and your Amiga. Now you can watch all your favourite films in superb, high-definition colour, again and again and again, with no loss of quality.

Squirrel MPEG is a SCSI peripheral that can be used in conjunction with any SCSI controller, such as the Squirrel, and any VideoCD compatible CD-ROM. Squirrel MPEG can also be used as a stand-alone unit as an addition to your TV, Video and Hi-Fi setup.

Available from late 1995 / early 1996, Squirrel MPEG is the latest in an established line of ground-breaking products, for you and your Amiga, from HiSoft Systems.



To Order

To order any HiSoft Systems' package, just phone 0500 223660, free of charge, armed with your credit/debit card. We will quote you a firm all-in-price and the expected delivery time.

cover disks

How to Load...

Cover disk 126

Cover disk 126 is packed with lots of goodies, as well as the main application **Texture Studio**. All of the data is compressed, so if you are running without a hard drive you'll need three spare disks onto which the programs and files will be expanded.



Hard drive installation

Boot from your hard drive and insert cover disk 126. Double click on the disk icon and double click the CUMenu icon. Now click on the Install CU Tools 126 icon. After a few seconds you'll be presented with the familiar Commodore Installer. Click on Proceed.

The installer will guess where you want the files to be installed. If it guesses right, click Proceed (a drawer called CUTools126 will be created). If not, select the destination on your hard drive. If you require a specific drawer for these programs, click on Make New Drawer and enter the name of your new drawer. Now proceed as normal.

Next you'll see a list of all the areas on disk 126. They will all be ticked to indicate that they will all be installed. It's a good idea to deselect the *Imagine* objects at this point if you want them installed in your *Imagine* Objects drawer. If this is the case, you can run the installation procedure again for the objects, selecting just the *Imagine* Objects this time, defining their destination in the earlier stages. Once you're happy with your selections, click on Proceed. The selected files will now be installed to your hard drive. To load each of the programs, open their windows and double click their program icons as normal.

Floppy installation

Floppy users should boot from cover disk 126, remembering to have three spare disks to hand. Double click the disk icon and the Floppy Users icon. You'll see five more icons. To install everything but the *Imagine* Objects, first double click the *Format_Tools_Disk* icon, follow the instructions, then double click the *Install_Tools* icon. This process will format a disk for you called CUTools126 and expand everything except the *Imagine* objects onto this disk. To use the programs, reboot with your Workbench disk. Check the instructions for system requirements.

To install the *Imagine* Objects, double click the *Format_ImagineObjs* icon and insert the remaining two spare disks when prompted. Now double click the *Install_ImagineObjs* and *Install_ImagineObjs2* icons to install the objects onto these disks.

Networking software

To go hand in hand with this month's networking feature, we've included the best PD networking software on the same disk as *XTreme Racing*. There's no front-end program to unarchive it for you so you'll need to do it in the AmigaDOS shell. Obtaining a directory of the disk, will reveal a subdirectory called *NetWorking*. Inside this directory are three LZX archives containing *ParNFS*, *ProNet* and *MagPLIP*. To extract these archives, perform the following steps in the shell;

```
CD <place to extract archive to>
XTR4:UnLZX XTR4:NetWorking/ProNet.lzx
XTR4:UnLZX XTR4:NetWorking/ParNFS.lzx
XTR4:UnLZX XTR4:NetWorking/MagPLIP.lzx
```

The CD line should be something like CD DH1:Networking or wherever else you want the archives extracted to. There's a text file called *Read_me_First.doc* with more details.



Cover disk 127 XTreme Racing

To load *XTreme Racing* – a fun and rather excellent racing game racing game from Guildhall, simply insert cover disk 127 and reset the Amiga. The game will load and run automatically. Refer to page 13 for full playing instructions. There's lots of fun to be had so buckle up and get ready for the ride of a lifetime (nearly).

IF YOUR DISK WON'T LOAD

If you go to great trouble to ensure that the CD Amiga Magazine cover disks will work on common Amiga models. However, if you do experience problems follow this simple guide. We also vigorously virus check our cover disks on a branded virus checker. If some escape our attention we cannot assume responsibility for it.

1. Remove all unnecessary upgrades and peripherals, such as printers and modems. Some trapdoor expansions can also cause problems.
2. Follow the instructions on this and previous pages exactly.
3. If you still experience problems loading the disk call the PCflynn helpline on 01645 350 585 between the hours of 10am and 12noon Monday to Friday.

If they advise that the disk is faulty, fill in your details in the form below, and send this form, along with the faulty cover disk and a 20p stamped self addressed envelope to:

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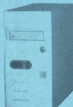


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AMIGA

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ProGrab™ supports any Amiga with Kickstart 2.04 or later & a minimum of 1.5MB, free RAM.

✂ A video source cable will be required to match your own equipment set-up. Ask for details.

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Supports all recent Amiga's and is also fully AGA Chipset compatible. You can render images in any Workbench screen mode resolution including HAMM mode (Amiga RAM permitting).

ProGrab™...
Sevens and Lushes images in RFF/ILBM, RFF/ILBM24, JPEF, BMP, PCX and TARGA file formats. ProGrab saves animations as "Animated files (GIF animations) with sound requires PCMCIA interface and separate sound sampler) as AVI or MOV files. A range of image processing effects, palette computing routines (AGA only) and dithering methods are also new to ProGrab Version 2.5.x. PhotoGraphics fully supports ProGrab with a custom Encoder to enable grab directly from within the program - saving YOU time!

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Software has built in menu and colour animation facilities. The number of frames is dependent upon your Amiga's RAM.

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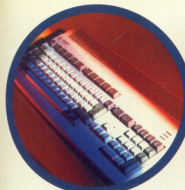
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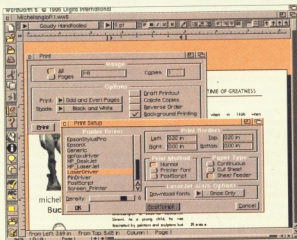
News

Wordworth 5: the next generation

We all need a word processor from time to time and on the Amiga we are blessed with two excellent examples in *Wordworth* and *Final Writer* (writes Larry Hickmott). In January of 1996, Digita will be aiming to take back the initiative from *Final Writer 4* when they release a major update for their flagship program, *Wordworth*. As many of you will know, the current version of *Wordworth* is 3.12. That is, revision 2 of 3.1. The jump to version 5 is all to do with the fact that in the bundle for the new Amiga is version 4SE and so to avoid any confusion between it and the new version, Digita decided to make the next full version number 5. But what can we expect to see in it?

The list of features is extensive and it is clear from looking at them that Digita are responding to feedback from users about what we all want to see in an Amiga word processor.

People like myself have been quite vocal in the press about *Wordworth*'s lack of high end



▲ Digita leap from version 3.1 to version 5 due to the inclusion of version 4SE.

features like *ARexx* and *Style Sheets*. It seems that Digita are all ears.

Two of the biggest high profile new features are in fact, *ARexx* and *Style Sheets*. Of the two, *Style Sheets* is my personal

favourite. One of the fundamental requirements when creating a document is to get a consistent look to your headings and other pieces of text, and *Style Sheets* will give you that ability. In my experience, *Style Sheets*, though,

can be complicated to use but with *Wordworth 5*, applying a tag to some text is as simple as dragging the name of the style sheet from its palette onto a paragraph of text. Drag and drop as they say. Another feature will be background printing. The document will save itself to memory and then carry on printing while the page is released so you can carry on working.

Two other new additions will be *Wizards* and *Notes*. The former lets you create documents interactively using pop up 'Wizards', questions that will allow you to set up attributes for your document and do all the hard work creating your pages. *Notes* will allow you to add endnotes and footnotes to a document. More text effects are also planned, including functions which allow you to stretch text, create small caps, double underline and more.

Due out in late January/early February, watch out for a review in the next issue. For more information on upgrades call Digita on 01395 270723. ■

Win a trip to the Amiga factory!

Amiga Technologies is planning a competition for 1996 which will see an Amiga user winging his or her way on an all expenses paid trip to the Soletron factory in Bordeaux, France next Christmas. The competition will have two categories, Graphics and Programming, and will be judged by Amiga Technologies themselves. AT boss Jonathon Anderson stated: "We want to encourage creativity in both areas

among your readers and the general Amiga community. There are a lot of talented people out there and we aim to reward this talent and the loyalty of the Amiga community". Although the competition will be run throughout 1996 with the winners announced at the end of the year, there will be regular judging and specific bi-monthly prizes too. We'll have more information and an entry form in the next month or so. ■



Jonathon Anderson: "We aim to reward the loyalty of the Amiga community"

AMIGA

Amiga Expo

The Paris Amiga show

The Palais de Congress in Paris, is a large exhibition centre and hotel, and on a cold, damp, foggy, strike-bound weekend in December it was home to the Amiga Expo (writes Andy Leaning).

This show was organised by a group of French dealers, developers and distributors who thought the time was right for a show-case Amiga event.

Being the first Amiga show in France for two years it was bound to be popular but even so most exhibitors were surprised by the crowds of eager Amiga users who turned up. There were still queues of people waiting to get in late into the afternoon of the first day.

Although small by UK standards, this was partly due to an all-out strike by the civil service in France which disabled all public transport making it a nightmare for many people to get to the show. But almost everyone agreed that if it hadn't been for the strike there wouldn't have been enough space in the hall anyway. The crowds who did attend were hungry for news, information and products. Most exhibitors did a lot of business with several products selling like the proverbial hotcakes.

In particular A1200s, CD-ROM drives, HiSoft's Squirrel, Directory Opus 5 and CD discs sold in large numbers. If there's one obvious

message that came out of the show it's that CD-ROM has definitely arrived on the Amiga.

Although it was a French show there was a strong UK presence. Paul Ralph from **Almathera** and David Link from HiSoft attending the show and **Wizard Developments** and **Gasteiner** waving the British flag from their stands. Wizard did very well, with their new stylish Black 560dpi mouse obviously appealing to the style conscious French.

Amiga Technologies were also there, waving the corporate flag. Posters were dotted around the hall proclaiming the 'Amiga: Back for the Future' while on their stand they had numerous A1200s and the odd A4000T strutting their stuff. At the front of the stand was an A4000T linked up to a large TV playing MPEG video - courtesy of **Pegger+** - a display that attracted large crowds. One thing that struck me is that the French Amiga community seems approximately half way between the English and German markets in its use of the Amiga. While Germany is well known for its high end technical Amiga market and the UK is more low key (lots of A1200s running games for example) the French used expensive systems with low end software. Walking around the show there were far more A4000Ts to be seen than other models, and these were for the most part equipped with fairly expensive peripherals - CD-ROM drives, large monitors, and Syquest drives being almost common but in general they were running low key software - *Adorage* etc. *LightWave* and the like were notable by their absence.

Elsewhere, **Cuda** and **Adept** shared the biggest stand of the show to demonstrate and sell several new products. Of these the biggest selling was an Internet application collection on CD. This contains everything you could want to surf the Internet on your Amiga, complete with an easy installer that

sets all the software up for you. It would be an understatement to say it sold by the bucket load. Currently, this is available only in French, but several UK firms are discussing availability and translation - definitely a case of watch this space.

Another interesting stand was that of **AmigaTel**. The French have a teletext system called **Mintel**. Unlike teletext however Mintel is a far more elaborate affair, with a keyboard entry system allowing users to buy over it as well as look up information. It has replaced paper telephone directories in many French homes. AmigaTel were showing a hardware/software combination that allows Amiga users to log onto Mintel and download files from it - currently there are some 500-600 PD and shareware programs available, a number that is apparently growing rapidly.

There were plenty of other stands which I don't have room to mention here. Amiga DTP was very strong with no less than three different firms all showing just what it's capable of in the right hands. The traditional Amiga video market was also well supported, with **VillageTronic** showing off Picasso and numerous other smaller company's putting genlocking and video timing applications through their paces in front of eager crowds.

Overall most visitors and exhibitors seemed pleased with this first show in two years. The organisers were already discussing another show within a year by the time I left. The strongest signal I got from this show was that although the French Amiga market is small it's very much alive, very hungry for new products and very excited by the Amiga relaunch.

It was a successful show and following on from the massive success of the Computer '95 weekend in Cologne it can only bode well for the UK show, which, we believe, has been put back again to April - coinciding with Easter. ■



The Stateside Column

By: Jason Compton

Well, they made it. AT had machines in time for Christmas in Europe and the United States. We

didn't get any of the new AT A1200 units, though, because none have been manufactured for NTSC standards yet. Instead, we're getting fresh new Amiga 4000 Tower units, 040-based and sporting the same software set A1200HD users enjoy. By mid-December, though, the quantity of machines sold was still less than 1,000. A number of users just don't seem ready to shell out the US\$2,700 street price for one of these machines, despite it being the most powerful Amiga computer ever shipped.

The Amiga Atlanta User Group's 10th Anniversary banquet looks like it will be drawing a number of celebrities, including Petro Tyschtschenko and Gilles Bourdin of AT and the hosts of computer programs on CNN and PBS. Amiga users from across the nation are signing up for this landmark event and the organisers are courting Amiga companies across the continent for sponsorship roles.

On the domestic distribution front, it seems clear that Soft-Logik's partnership with Digita will form a distinct set of competing camps for the Amiga business application market. While Soft-Logik's *PageStream* application may have indirectly competed with Softwood's *Final Writer* program, Digita's *Wordworth* now directly challenges the Softwood flagship. *Datastore* will face off against *Final Data*. In the spreadsheet arena Fred Fish's *Amiga Library Services* will retain North American rights to *FinalCalc*. The *Personal Paint* publishing contract, also acquired by Digita should increase the visibility of this elegant paint and image manipulation package in the States as well as enhancing Soft-Logik and Digita's reputations for providing full suites of capable applications.

Finally, a new Canadian company's game looks like it may re-establish North America as a viable land for game titles. They're called Click Boom and are lead by Amiga programmer Alexander Petrovich and their project Capital Punishment is pre-viewed on page 43.



▲ The Paris Amiga show proved that there is still plenty of life left in the Amiga market.



▲ The success of the show was evident when the organisers were discussing another show within a year.

Silica Rescued

Long-time Amiga distributor and retailer Silica, recently reported to be in financial trouble, has been bought by a company called Anglo Corporation, owned by businessmen David Gosling and Stuart Tidy. The buyout cost was £5M in total. Partner David Gosling's other business interests include the NCP car parks and Silica's existing expertise is being retained in the form of two of the original directors, Tony Deane and Mike West.

Although some sources claimed that the takeover would mean a reduction on the Amiga side of the business, Jonathon Anderson of Amiga Technologies was quick to discount these claims: "Silica and Amiga have always had a good and profitable relationship, and I can tell you now that this will continue" he said. Jonathon himself was previously employed at Silica, where he organised the launch of their first software bundle packs,



▲ The Silica Magic pack includes extra software for your money. All existing warranties will be honoured.

before moving to Commodore.

They have announced that all existing warranties and orders will be met, despite the takeover. Both their mail

order (Silica are regular advertisers in CU Amiga Magazine) and retail outlets and their concessions in department stores will continue trading as normal. ■

Sim Tower

Maxis, masters of the Sim are currently investigating the possibility of producing *Sim Tower* and one other unspecified game for the Amiga. Despite an embargo on Amiga products since last year's *Sim City 2000*, they now feel that the market might still be there and have been discussing releases next year. Amiga Technologies confirmed that Maxis had been talking to them, but declined to say anything else. Acclaim are also reported to be examining some comeback products for the Amiga, the first of which is a publishing deal for Domark's *Championship Manager 2*. ■



▲ The PC version of Sim Tower.

Term author to boost OS development

With Amiga Technologies' decision to base future operating system development in house, they've been on the lookout for new staff to add to their expertise, though no significant increases have been authorised. Thus the announcement of the appointment of Olaf Barthel, the author of the PD modem communications package *Term*, onto the operating system programming team is welcome. Having shown great commitment to the Amiga market by

revising his freeware *Term* for years with regular updates, he would seem ideal to join the team. Perhaps they should continue to approach fellow German Amiga developers such as *ShapeShifter*'s legendary Christian Bauer and *Magic User Interface*'s Stefan Stuntz? If they can keep up the trend, Amiga Technologies look set to gather together an extremely experienced programming team which should bring us wonderful things in the future.

Hi-Res Epson Driver

Great news for users of the Epson Stylus colour printer. Eyetech have produced a 24-bit, near picture quality printer driver for their machine. They sent us a demo printout using the driver, called Endicor, and it was superb. The initial reaction here in the office was that it was produced using a much more expensive

printer. The Stylus costs around £400, but with Endicor it produces the sort of results you would expect from something nearer the £1000 mark.

Expect a full review of the Endicor 24-bit driver in next month's CU Amiga Magazine. It costs £34.95 and is available from Eyetech on 01642 713 185. ■



New Pen Mouse



Golden Image have unveiled a new version of their Pen Mouse for the Amiga. Held like a normal pen, it has a ball at the tip and features 250 dpi resolution. This mouse would be of most use to Amiga artists that need a more genuine feel when painting in their favourite package. The jury is out on whether it succeeds though, with the relatively low dpi resolution. Look out for a review next month. Golden Image can be reached on 0181 900 9291. ■

ICPUG Southeast

The Independent Commodore Product Users Group are planning a Q&A session in February. It will take place in Biggin Hill, Kent, is being organised by ICPUG South East and will include on its panel Jolyan Ralph

from developers Almathera and other experts on the Amiga, graphics and the Internet. For more information contact John Bickerstaff at 45 Brookcroft, Linton Glade, Croydon, CR0 9NA. Tel: 0181 651 5436. ■

Matt Broughton's



Games in view

It makes a nice change to be able to start with some good news, this time from Amiga-loyal **Grandslam**, where their massive adventure/fantasy RPG **Seventh Sword of Mendor** is back in production having been left on the back burner while **Escom** sorted themselves out.

Unfortunately, delays are possible (he said in his best British Rail announcer's voice) due to overhead cable problems... er, sorry, thanks to some problems with the CD-ROM version that have had to take precedence over the Amiga project.

The Grandslammers are, however, still confident of an Amiga release for the first quarter of 1996. The end product will be hard drive only because the game is currently sitting on nine disks, 'thanks' to the likes of extra music and speech.

As for any future Amiga products, well... it's hard to say. Grandslam's main problem has been finding distributors to take on the Amiga products, and while the likes of Beatties are happy to deal with Amiga, they're not on

The Amiga's gaming future may be as glistening bright as could be but that doesn't stop our bold investigator from sticking his nose where it doesn't belong.

the Gallup roster, so things (shall we say) are slightly less than perfect. That said, Grandslam are still remaining open-minded as far as Amiga projects go, although they have reported a distinct drop in the quality of submissions they've been receiving. They reckon that this is simply because there isn't enough encouragement for the market to succeed.

Still, though Grandslam are spending more time with their InterNet work (they run a **Cybersports Fantasy League** site) they will hopefully be announcing a new Amiga release for next year, but I can't really say much more right now (very hush, hush until contracts are signed you understand.) All I can say, is that it is a game we've seen about before, and it looks pretty darn juicy, so keep 'em peeled.

New comers, **Effigy Software**, are a company facing a similar scene, where the possibility of projects beyond their first release, **Pinball Prelude** (see review elsewhere this issue) relies completely on how sales go.

Ian Jenkins is the main man at the year-old, Lincolnshire-based company, and reckons that there needs to be a much stronger Amiga games market before they'll risk any more releases. As far as drawing board projects go, there are plans to have a non-AGA version of **Pinball Prelude** for the new year, along with a new game that, while having no title as yet, is a sort of spoof detective adventure. Looking like it'll squeeze onto something like five or six disks, it boasts a number of scenarios, along with multiple paths to success and failure.

Ian considers 5,000 units to be the sort of sales they'll need to convince him that Amiga products are financially viable, but

that said, even if they do decide to go ahead with more Amiga games, we aren't likely to see anything before Christmas of next year.

Another factor affecting games developers (especially for Ian, who was the man behind **Virgin's Apocalypse** - where he feels he was let down by weak distribution) is the problem of finding and organising decent distribution for the products. Apparently, there are so few distributors still involved in the Amiga market, Ian has had to take control of all his own production and distribution just to make things worthwhile! In his attempt to keep the ball rolling, Ian is also in contact with other developers, as well as trying to get hold of an old **Psygnosis** title of his that was shelved when the great **Sony** stepped in to take over. A man who means business, and certainly a name to look out for in the future I feel.

Soundscape Multimedia is a company almost accidentally finding themselves involved in the Amiga games scene, having eaten up the company formerly known as **Rasputin Software**. Soundscape are primarily a

multimedia education company, but following the acquisition of the aforementioned Rasputin (who you may remember were behind **Jet Strike**, **Clockwise**, and **Base Jumpers**) are now offering these three games at the bargain price of £9.95.

Though **Base Jumpers** was pretty arse, both **Clockwise** and particularly **Jet Strike** are fairly interesting and might be worth a butchers.

Should you be interested you can contact Soundscape on 01689 602123. As for whether they'll be involved in future Amiga releases, well, it's all down to whether they actually receive anything of a high enough quality.

And that would appear to be that. It's a shame if one of the main reasons people are abandoning the machine is because there are so few places left to sell their wares, and we can only hope that more companies take charge of the situation themselves.

Anyway, enjoy the HMV charts (I know I do) and I'll catch you next time round. Be seeing you folks... **■**

Matt Broughton



▲ **Pinball Prelude**: new boy about town Effigy Software's first release. And it looks good.

HMV CHART... Amiga Top Games

No	TITLE	PUBLISHER
1	Worms	Ocean
2	Alien Breed 3D	Ocean
3	Player Manager 2	Virgin
4	Sensible World of Soccer	Virgin
5	Ultimate Soccer Manager	Sierra
6	Lion King	Virgin
7	Monkey Island 2: LeChuck	US Gold
8	Super Skidmarks	Guildhall
9	Fantasy Manager 95/96	Hit Squad
10	Football Glory	Beau Jolly

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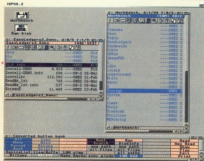
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Networking Amigas

Make all the right connections with our comprehensive guide to all you need to know about linking two or more Amigas together. There's endless amounts of fun to be had once you do: two player Alien Breed is just one of the reasons why you'll thank your lucky stars you learnt how to link up.

Many Amiga users have been with the platform since the first generation of machines, upgrading to later models of Amiga when they came out. Unlike other platforms, those first generation Amigas are still useful in their own right. Many a Kickstart 1.3 A500 can be put to good use if you know how. The trick is to add their capabilities onto your main machine so everything can be used and controlled from your main working Amiga. Whether this means sharing hard drives, doubling up audio channels, playing games or shovelling files to another Amiga for time-intensive processing of any kind, there are stacks of example scenarios in which networking two or more Amigas can improve your quality of life.

The most common resource that another machine can provide is that of storage. For example; A570 CD drives for the A500 can still be obtained at a ridiculously low price, so coupling that with your old dust gathering A500 and then 'networking' it to your A1200 will bring cheap CD-ROM access to the A1200. Networking need not be a one way road either. If you had two or more Amigas in a 'working' environment (as we do

in the CU Amiga Magazine office), then they can be networked to share files both ways. In our particular setup for example, Mat can access the CD-ROM drive connected to Tony's A1200, while Tony is free to use Mat's larger hard drive as a temporary dumping ground for all his incoming E-Mail. One user can even run complete software packages directly from the other user's hard drive, and unlike similar systems on other platforms, this can all happen with no noticeable performance loss from the 'source' computer. This can obviously be a very beneficial arrangement.

Choice of three

There are three main ways to network your Amigas together: serial networks, parallel networks and TCP/IP networks. TSerial is the slowest method, TCP/IP the fastest, and the parallel solution is somewhere between the two. Speed is an important feature in any networking solution but it comes at the price of complexity and expense. Different uses call for different network systems. Simple infrequent usage of a CD-ROM drive would be possible with a serial network. Heavy usage and/or swapping files from a hard

drive will be more suited to a parallel network. Sharing hard drives between many machines where speed is a serious consideration means that Ethernet is the way to go. Let's look at what's involved with each in turn.

CD32 link up

When we cover mounted an Aminet CD-ROM on our November 95 issue, many readers hooked up a CD32 to their main Amiga to access the data. While the CD32 has not turned out to be the world-dominating games console success that we had hoped for, it's still a perfectly usable CD-ROM drive. Your Amiga can gain access to it with the correct equipment and software. Unfortunately, Commodore in their not-so-infinite wisdom, decided to fit the console with very few useful in/out ports except for the key-board socket, which happens to be the CD32's serial port. So, what's needed is a special serial cable to connect this socket on the CD32 to the serial port on the host Amiga. You'll also need to run some networking software on both Amigas. Naturally since the CD32 has no floppy drive, its software will have to be on CD.

Weird Science have come to



the rescue with a special networking CD package called *Networking 2*. When this CD is booted from the CD32, it waits for further instructions from the host Amiga. The package also comes with a floppy disk containing the vital software to load onto the host Amiga.

Fortunately this system uses its own serial settings which means that a rate of 57,600 baud can be used or even 115,200 baud, although this has been known to cause errors during transfer. This differs from the earlier networking software used for CD32 connection which used the Workbench serial preferences set to the highest rate of 32,500 baud.

The Amiga's internal serial port is sadly deficient in that it only has a single byte buffer. This means

that high serial speeds can't be attempted if the CPU is constantly being interrupted by running other tasks. However, 115,200 baud should work fine if you are just copying files from the CD32 to your main Amiga. There's a file manager program provided in the *Networking 2* package for just this job. Serial networking will always be slow but if you only want to browse through CDs and you don't mind a little waiting around then it's an easy and cheap solution.

Networked Breed

Serial networks can also be used on all other types of Amiga. The cable (known as a null-modem cable) is amazingly easy to construct and even easy to buy ready-made. There are two common varieties. The first is a '3 wire' cable which is suitable for serial link-up games and low-speed networking. The other is the more complex '7 wire' cable which can be used for games and high speed (for serial) networking. If you're buying a cable especially for networking, it couldn't hurt to make sure that you are getting a real 7 wire cable and not the slightly cheaper 3 wire variety.

The bonus is that when you've finished up swapping files between your machines you can have a quick networked game of *Alien Breed 3D* without shifting a cable.

Once you have a serial cable in place you can choose one of two ways to transfer your files. The easiest method is to load up a standard communications terminal package, normally used with modems to call BBSes and the like. A copy of this running on both machines is needed. Select a Z-Modem 'send' on the source machine, pick the files you want to send from the file requester and away you go - they should all be sent directly over to the other machine via the Z-Modem protocol. The bonus of this method is that the transfers will be checked for errors by the terminal package's special Z-Modem protocol and any error will be re-sent until that portion of the file is received. For this reason, it's possible to select a very high serial rate on the terminal package as any occasional errors will be re-transmitted. *NComm* is one example of an easy to use terminal package that'll perform this job nicely.

However, if two machines are to share their devices without the aid of manually sending files,

some proper networking software is required. The most common is known as *SerNET*, developed by the Software Distillery many years ago but has unfortunately not seen any updates since then and possesses quite a few bugs. Another PD/Shareware package going by the name of *Pronet* has seen much better development. The drawback is that it doesn't support simple 3 wire serial cables which means it's unsuitable for CD32 use. It does, however, function very well with a 7 wire cable. All this software is quite difficult to set up, requiring editing of text file configurations but *Pronet* is by far the better of the two with fairly comprehensive AmigaGuide documentation and example config files.

Parallel networks

The networking method that we recommend for most situations is generally known as *ParNET*. It makes use of the Amiga's parallel port which is capable of moving data at a far higher speed than the serial networking method. The main reason for this is that 8 bits are shifted in parallel, hence the name of the port, whereas serial

Musical chain gang

Musicians have plenty to gain from chaining Amigas together. The Amiga's audio hardware is just about the only component that hasn't been upgraded since the first Amiga 1000 a decade ago. However, by combining the power of two, three or more Amigas you can drastically improve your musical options. Here are some ideas.

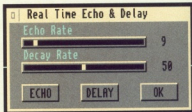
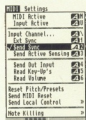
Daisy chain

One of the best ways of expanding your music setup is to add some MIDI equipment. You can pick up a MIDI interface for around £20 from number of advertisers in this magazine, and this will allow your Amiga to record from and control any modem

electronic musical instrument. MIDI interfaces are fairly simple things and there's little to choose between different models. However, it's a definite advantage to get an interface with as many MIDI Out ports as possible. It's possible to 'daisy chain' a number of MIDI instruments together in series, but to avoid timing delays it's best to give each instrument its own direct feed from the MIDI interface, hence the advantage of a number of MIDI Out ports.

Extra sampler

If you already have a MIDI music set-up, whether it's based around an Amiga or any other computer, you can always put a second Amiga to good use as a MIDI-controlled four channel sample replay unit. With software such as *Technosound Turbo II Pro*, you can connect the second Amiga to your sequencing computer via a MIDI interface, load in a few samples and tell the second Amiga to act as a MIDI module. You can then trigger these samples from your sequencer running on the other computer.



▲ Why not employ an old A500 as an effects unit?

For effect

Prices of dedicated effects processor units are falling all the time, but if your requirements aren't too grand, it's worth employing an Amiga for the job of adding echo, reverb and various other effects to your music. There are many programs that offer real-time effects processing, such as *AudioMaster IV*, *DVerb* and *TREG* from recent CU Amiga Magazine cover disks, as well as most sampling packages such as *Technosound*, *MegaloSound*, *Aura* and *Audition 4*.

Strictly speaking this isn't actually networking, as the only connection between the 'second' Amiga and your sound source is an audio cable. However, it is nonetheless a very worthwhile

use for a redundant Amiga, and any old A500 will do the job.

Seeing double

Synchronising two Amigas running *OctaMED*! It's very easy to do and it expands your overall sample channels to eight (without degrading the sound quality). *OctaMED* needs to be running on both Amigas and they must be connected to each other through a couple of MIDI interfaces. The Send Sync option should be set on one machine, and Ext Sync set on the other. When Play is selected on the first Amiga, the second Amiga will automatically start playing too. Or you can synchronise them by hand if you trust your timing better than that of your Amigas.



▲ With Technosound your 'spare' Amiga can become an extra MIDI sample module.

interfaces move one bit at a time down a single line. Around about 50K per second can be pushed through the parallel port without any trouble. The *ParNET* cable itself is a special Amiga specific cable which is fairly complex compared to a serial cable. Luckily it can be bought cheaply from various Amiga retailers.

Once again, the Software Distillery came up with the *ParNET* system originally, though the bad news is that development was ceased several years ago. The good news is that there are newer PD/shareware parallel networking packages available that use the same cable. After a great deal of experimentation networking our Amigas in the office with various systems, we came to a few conclusions about which work best.

First of all, the original *ParNET* system contains a few bugs and is unnecessarily slow. An Italian gentleman by the name of Luca Spada replaced the *ParNET* device driver with a hand-optimised assembler coded variant which features a considerably higher transfer speed. It's a drop-in replacement for the *ParNET* device provided in the original package. This still doesn't fix the bugs in the network file system, but help is at hand with a new system called *ParNFS*, which has the advantage of being easier to set up. These two combined give a network that offers high performance and reliability. We found this set-up to be the best for our use.

Pronet

There is another system that we tried which initially showed a great deal of promise. *Pronet* is notable for its speed which exceeds the optimised *ParNET* device and *ParNFS* combination. What's more, it's a completely integrated package that has the network file system and device drivers built-in. It even supports 7 wire serial cables as mentioned earlier. Without a doubt, *Pronet* would be the way to go for networking two Amigas together if it wasn't for one serious problem: stability. *Pronet* seemed to be a little keen on crashing and if one machine crashed or reset everything went down the tubes. A reboot and re-run of the software servers hardly ever brought the networking back up. Still, if resetting both machines at the same time isn't a major problem, *Pronet* is definitely worth a look. *Pronet* also seems to be under active development with new

versions being uploaded to the Internet Amnet archives on a regular basis. Perhaps soon it'll get the problems ironed out to become the best parallel networking package.

PC to Amiga?

ParNET type methods have the drawback of only being able to connect Amigas to Amigas. However one new commercial product has come along to change all that. Link-It from Zero Gravity, has a simple directory utility style interface but is capable of transferring data between the PC and the Amiga, as well as a pair of Amigas. Because of this it comes in two versions, one for the Amiga and the other to run under the PC's Windows. It's quite easy to set up and definitely worth considering if this is what you need. Call them on 0181 402 5770 for more information.

You'll find some of the software mentioned here on cover disk 127 with this issue. Beside this month's XTR game demo disk, there's a directory called NetWorking. Three LZX archives are included containing MagPLIP, ParNFS and ProNet. There's also a readme text file which explains exactly how to decompress the archives. UnLZX is included on the disk and all decompression will have to be performed in the AmigaDOS shell manually.

IP networking

There is another method of networking which is more common at the office than the home but well worth consideration all the same. This involves using special IP (Internet Protocol) networking software such as *AmiTCP* or the excellent commercial networking package *Envoy*. These packages, on the Amiga, support a special standard called SANA-II. The beauty of this system is that if you have some kind of networking hardware and a SANA-II driver, the software can use that networking hardware even though it wasn't designed for it. The single most common use for a SANA-II driver is CSLIP or Compressed Serial Link Internet Protocol. This driver is most often used by Amiga users to network their Amiga to the Internet rather than another Amiga (though there are thousands of other Amigas on it). *AmiTCP* is most usually used for this purpose and it's worth checking out the Wired World tutorial in previous editions of CU Amiga Magazine for more information.

The odd man out

There's one networking solution that refuses to be categorised into the main areas covered here. The *AmiLink* system, as reviewed in CU Amiga Magazine last month, is a multi-machine network that comes with two different suites of networking software. Its own *AmiLink* (which runs on 1.3 machines unlike *Envoy*) and *Envoy*. What's different about *AmiLink* is that it uses the disk drive port of the Amiga for the hardware. Using standard Ethernet type cabling, up to 200 or so machines can be connected and without tying up the parallel port. Another bonus is that because the Direct Memory Access (DMA) disk drive circuitry is used, very little CPU time is consumed during transfer which is a serious limitation with all parallel networking solutions we have seen.

AmiLink would be suitable for user clubs, schools and other groups but the cost is unfortunately quite high for hobbyists and there's no UK distributor at this time. Users interested in this type of network should check out last month's review and perhaps call *AmiTriX* for themselves in Canada on +1-403 929 6459.

AmiTCP can also be used to network local Amigas together with a null-modem cable and the CSLIP driver, though in practice this is even slower than a dedicated serial network. Less well known is the fact that there's a SANA-II driver for a parallel cable. This type of cable is known as a PLIP or Parallel Link Internet Protocol cable and it's a different make-up than the bog-standard Parnet cable. Such a driver used with *AmiTCP* would again form the basis of a local network, though the use of *AmiTCP* increases the complexity to impractical levels. A better package to use for such a task is *Envoy*. Designed specifically for networking local machines, it makes the PD/Shareware dedicated serial and parallel solutions look like toys. For details on how to make the cable, refer to the documentation in the *magPLIP* driver archive on the CU 127 coverdisk in the NetWorking directory.

Sharing the net

One very useful application for using an IP network is that it's possible to have all machines in the network access the Internet if only one of them is physically connected. Such a system is difficult to implement and it requires a great deal of manual reading and software configuration, but it does work. So much so that it's possible to have several machines browsing the WWW and chatting on the Internet Relay Chat (IRC) all at the same time, though of course, the speed will be limited by the host Amiga's connection to the Internet. Internet cafes use this kind of system. This aspect will be covered in a future CU Amiga Magazine Wired World tutorial.

Envoy

Envoy does a few more things that *ParNET*, *Pronet* and *Sernet* can only aspire to. It has full file security and accounting. It's possible to let special users only have a certain access to your drives. Password protection and logging of activities is also on offer but perhaps of most use to hobbyists is that *Envoy* handles a loss of connection perfectly each time. Any machine could crash or be reset and *Envoy* will renegotiate the link when it is next available. *Envoy* used with a special PLIP parallel cable and the PD *magPLIP* device forms a very stable and secure network which while slightly slower than dedicated parallel solutions, is a delight to use. We've put the *magPLIP* SANA-II driver archive on the CU 127 coverdisk in the NetWorking directory.

Liana

A complete networking bundle known as *Liana* consists of a PLIP cable with *Envoy*. Developed by VillageTronic and distributed in the UK by Blittersoft, it is most certainly cheaper to create your own special PLIP cable and purchase *Envoy* independently (and get a later version than is supplied with *Liana*) but *Liana* may well be worthwhile as a





no-fuss working out of the box package with good printed documentation. VillageTronic's Ariadne Ethernet board also has a spare parallel port and is provided with a Liana compatible driver.

Ethernet

Out of the need to provide a very fast and cheap to cable networking method, a special standard in use on all platforms was born. Ethernet, as it's known, typically transfers data at the amazing rate of 10 MEGabits per second and some even higher. If you have to ask, that's well over 1Mb every second. Ethernet is most usually implemented as a Zorro card for big box Amigas. These cards are usually bundled with *Envoy* and a special SANA-II driver for the card.

Unfortunately they cost extortionate amount compared to Ethernet cards on the PC for example. This puts it out of the useful range for 99% of hobbyists with an example being VillageTronic's Ariadne Ethernet board rocking in at £220 for just the one.

The Ethernet card for the A1200, I-Card, runs from the PCMCIA slot and is even more expensive than a Zorro Ethernet card at £239. For those who have to file share to other platforms and when using a simple system like *Link-It!* isn't viable, Ethernet is pretty much the only way to go. The generic TCP/IP standard being something that even the PC and Macintosh can converse in too.

Well connected

The technicalities of getting each type of networking software is beyond the scope of this overview but suffice to say that TCP/IP methods get very complicated indeed. One of the authors of the *Envoy* networking package has written a book on the general topic of networking called *Connect Your Amiga*. It's a good reference guide for anyone thinking of going deeper into the topic. Users of the dedicated Amiga networking packages

What, where and how much

Envoy 2.0b peer to peer networking package	£36.00 + £2.50 p&p
Connect your Amiga book by Dale Larson	£11.95 + £2.50 p&p
Fourth Level Developments	0117 985 4455
Liana parallel PLIP cable + Envoy pack	£64.95
Ariadne Ethernet + extra parallel Zorro card	£219.95
BlitterSoft	01908 261477
Amiganet Ethernet Zorro card	£239
I-Card PCMCIA Ethernet card for A1200	£239
White Knight Technology	01920 822 321
AmiLink 2.0 floppy disk drive networking system with connectors, terminators and 5 meters of cable.	US\$299 + 1 403 929 6459
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CD32 networking cable + Network 2 CD and floppy	£39.95
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World Science	0116 236 4932
CD32 connection kit III - Cable + Network 2 CD -	£34.99
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Link-It Amiga to PC serial/parallel networking software	£TBA
Anti Gravity Products Europe	0181 402 5770

such as *ParNET* and *Sernet*, would be advised to print out the documentation that comes in the distribution archives. Most causes of

problems with these networks are due to incorrectly set up configuration files and such forth. ■

Mat Bettinson, Tony Horgan

A spot of serial killing never did any harm did it?

If you're all connected up, why not spend some quality leisure time blowing up aliens and other creatures. Two of our top rated 'Doom' clones are serial link compatible. *Alien Breed 3D* and *Gloom* are both due graphic updates in the next couple of months but even in their original form are well worth having for your network.

Gloom is ideal for two player



▲ *Gloom*, spectacular side-by-side serial gaming.



▲ *X-Treme* racing, 'up to four players at a time'.

side-by-side combat. If you and a mate are well into war games you can team up via a cable and go into battle together. Although there is a split screen two player mode, the advantage of using two machines is that it's both faster and you get a full screen each. If you fancy a bit of head to head action then *Alien Breed 3D* should be right up your street. In it you and another person are able to fight each other in a nasty, competitive environment, and still go to the pub later on with no animosity and lots of stories to tell.

Easy peesy

Games serial links need not be as complicated as those used for other applications, basically there's only three connection points needed for most, and you can get a decent length of cable from many sources for under £20. Companies like Grey-Tronics who advertise in this magazine offer various lengths, and you should be able to get whatever you want from them. But if you're going to use your machine for productivity then you'll need a proper 7 wire serial link, which

can be used for both purposes. It's worth remembering that if you are using a parallel link then you will NOT be able to play games using it. They are serial link only. It's also worth noting that if you get a really long cable these are prone to creating errors. Unless the cable is of a very high quality anything over 5 metres or so will start causing trouble. If you do want a really long cable, insist on high quality connectors and cable, it'll cost you, but end up worth it.

Lots more

Other games worth mentioning are, for flight sim fans, *Knights of the Sky*; for strategy fans *Populous* and for racing game fans you will not go far wrong with either *Super Skidmarks* or the forthcoming *X-Treme Racing*, the cover disk on this very issue. Although you will notice that our demo has its serial link capacity disabled you will be able to play a four player race in the full game. This uses the split screen two player mode on both machines, and is fast and fun. *Super Skidmarks* goes even further, allowing you to play up



▲ *Alien Breed 3D*: kill a friend, then make up.

to eight players, though the amount of screen space for each player becomes very, very small.

Get into network gaming: it's very rewarding. The competitive aspect of two or more players is vastly enhanced and with two machines operating instead of one, speed is guaranteed. Not all null modem games are stable via network and especially if you are networking with different Amigas you can expect some problems. Patience is sometimes required but the end result is always fun.

Contacts

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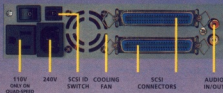
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Portable Amiga Workstation

It's the ideal small home computer, but with a separate power supply and the need for a monitor or TV it's hardly portable. But those crazy Yankies ...

As portable PCs get more and more powerful and attractive you might think that Commodore missed the boat: surely a portable Amiga would have been a mighty useful tool? Well you're not the only one and Silent Paw Products, an American company totally dedicated to the Amiga not only dreamed about it, they took up the cause and actually produced one.

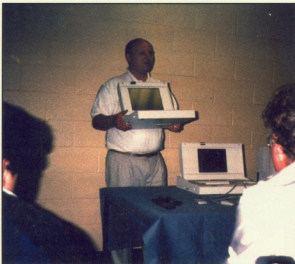
It couldn't be done ...

For years we have been told that an Amiga laptop was unfeasible because of the high power requirements of the custom chips that the Amiga relies upon and the difficulty in making a LCD display conform to the Amiga's scan rates. Commodore never endeavoured to design an Amiga laptop, believing that there was not sufficient demand for one to warrant the time and resources necessary.

After Commodore disappeared, however, a chap called Shawn Randolph thought that it would be cool to put his A1200 in a case with a LCD screen. And so the idea for the first Amiga portable was conceived and Silent Paw Products was born.

Turning this idea into a product was much harder than Randolph anticipated though. It took nearly eighteen months to create the dream as it went through prototype after prototype, trying to iron out problems. In the end, they ended up designing their own hardware solution for the problems that the LCD screens encountered with the Amiga's scan rates.

Finally, after the long period of anticipation, the Portable Amiga WorkStation, or PAWS, was introduced to the world in late



▲ Silent Paw Product's Shawn Randolph demonstrates the A600 PAWS.

November at a user group meeting near Washington and four days later at the Video Toaster User Expo in California. A600, A1200 and A4000 versions were on display though due to problems with their power supplies, they were still not completely functional at this stage.

A heavy load

The PAWS kits are not like PC or Mac laptops. They are much bigger and bulkier. Because there was no way to license the Amiga technology when they were being developed Silent Paws Products could not develop their own motherboards, which could have been specially designed to fit into a more compact laptop. Because of this you are now forced to literally place your A600 or A1200 into a

large metal case which has a LCD screen attached. In an effort to keep costs down, The A600 and A1200 models are made from aircraft aluminum and are rather heavy by comparison with PC laptops. However, Randolph is keen to point out that the aluminum makes the casing very sturdy, claiming that: "These PAWS can probably stop bullets!"

The A4000 and A3000 models are lighter as they are housed plastic OEM.

The A600 model is the only one that could be compared to a PC or Mac laptop. It is relatively compact at 14" x 12 3/4" x 4 1/2", is just slightly wider than the average PC laptop, although heavier, at 11lbs, and a bit taller when closed. However, the A1200 is seen as the better choice because its basic



CPU is faster than the A600 and so it's well suited to running the software that people want a laptop for such as a database, communication programs, spreadsheet and word processors. This A1200 version can also accept added accelerators that go in the A1200's trapdoor slot.

The only real problem with the A1200 PAWS model is its size: it is four inches wider than the A600 version. Still, because of the power limitations of the A600 it is seen as more practical. However, the A600's compact size together with the new A620 accelerator board make now make it a more attractive option.

That bit extra

One nice feature of both A600 and A1200 models is that you can still use the PCMCIA slot. This means that you can add a CD-ROM drive, PCMCIA fax/modem or Zip drive, adding even more portable power. The A600 and A1200 models also come with a trackball. Called the PAWSTrac it's a compact trackball with a solid feel and a professional look. Originally a PC compatible trackball, it's been re-engineered by Silent Paw Productions to fit both laptops.

Luggables

The PAWS kits for the A3000 and A4000 are not meant to be laptops and are generally known as 'luggables.' These luggables are designed for professionals, such as videographers, who need to take a lot of equipment and their computer with them on shoots. They are designed to "allow Amiga users to do away with having to pick up a whole



▲ Here's the line up from left: the PAWS 600, A1200 and the mighty luggable.

bunch of junk, allowing you to easily move from site to site and use your Amiga. Currently you have to pick up your A4000, your monitor, all the cables, all the power supplies, all the bricks, and then set this all up. That takes a little bit of time and is frustrating. PAWS allows you to pick it all up in a case and go," said Randolph.

Clip on keys

The A3000/A4000 model comes with a keyboard, so all you do is place your motherboard into the kit and you can fit a video card (such as the Picasso II or Video Toaster) in there as well.

The keyboard, (specially designed for PAWS and not a Commodore product) can be clipped onto the side to make it easy to carry and the LCD screen is built into the side of the box as well. The A3000/4000 prototype model also has an Alps Glidepoint built into the keyboard. This is

used as a mouse/trackball replacement allowing the pointer to be moved on screen by simply dragging one's finger around the surface of a pad.

Battery operated

Silent Paw Products claims that the PAWS kits run on batteries for approximately 1 hour and 15 minutes, about three to five times less time than current PC and Mac laptops. It runs on two DRE31 batteries, which cost from \$60-\$100 (or about UK £37.50-£62.50), depending on whether you buy the cheaper Compaq batteries or the more expensive Duracells.

Luckily, for those who will find their budgets quite small after they buy a PAWS, the batteries can be recharged in the PAWS when you are not using it. Batteries are not included in the package. However, these batteries are made by Compaq, one of the largest laptop



▲ Mr Randolph hopes that his company, Silent Paw Products will become AT's laptop distributor.

makers, and Duracell, one of the world's largest battery producers, so there's no need to worry that you won't be able to find a battery for the PAWS.

Low on software

The PAWS does not come with much software, once again to keep the price down and from the assumption that most users of the PAWS will already have software that they bought for their desktop Amigas. It comes with software drivers for the LCD screen and the trackball, and Link-It and CrossDos v6 software. CrossDos v6 is a newer version of the CrossDos software which comes with Workbench 2.1, 3.0, and 3.1 and the Link-It software allows you to easily transfer files between the PAWS and another Amiga or a PC, with just a cable.

This is very helpful for those who are forced to use PCs at work or if they simply don't want to have to copy files onto their PAWS from their Amiga by disk. Randolph stated that the high price of the PAWS stemmed mostly from the LCD screen, which accounts for about 75% of the cost.

His hope is, however, that as more and more laptop computers are produced for all platforms, the price of LCD screens will drop considerably, lowering the price of the PAWS.

Any future plans?

Silent Paw Products has other plans for the Amiga apart from just the PAWS. Their next release will be the Gecco, which is an external device that will plug into any Amiga and use a standard VGA monitor by scaling the Amiga's image to 640x480, the

PC's standard. (This is essentially the same unit built into the PAWS to allow that Amiga's many scan rates to work on an LCD displays with only one scan rate.) The Puma is another Amiga laptop planned for the future from Silent Paw Products, which would be a laptop out of the box, as opposed to the PAWS, which you must put together yourself.

They plan to redesign the Amiga motherboard for the PAWS, to make it smaller, use less power and to put a 68060 chip on it for more computing power with less electricity consumption, but they have yet to even talk to Amiga Technologies about licensing the technology necessary to do this.

"We'd actually like to be the laptop company for Amigas," commented Randolph, "But again, it's completely up to them [Escorn/Amiga Technologies]."

The only option

The PAWS is far from a complete solution for Amiga owners yearning for a laptop. The price is out of many peoples' range and the battery life is not very long.

Nonetheless, for people who need an Amiga laptop, it is the only option they have, and for videographers, the A3000/A4000 model makes a good portable Amiga for video work, and with help from Amiga Technologies, they can make the Puma the first real laptop for the Amiga.

The Amiga laptop is not in the UK yet, but with the introduction of the PAWS, the Amiga took a large step forward towards that goal. We'll keep you posted on what is happening and when you might expect to see them. ■

Joshua Galun

Technical Data ...

Dimensions:

14"W x 12"D x 4QH (PAWS 600)

18"W x 12"D x 4QH (PAWS 1200)

Power:

Auto-switching 110/220V external power supply. Internal monitoring circuit that warns users of low power situation when system is off.

Battery Life:

Average battery life is 1.25 hours. This figure may vary with the individual Amiga system configuration and use.

Weight:

PAWS 600 - 11 pounds (Fully loaded system)

PAWS 1200 - 14 pounds (Fully loaded system)

LCD:

640x480 Active Matrix Color Panel (10.4" Diagonal measure)

Cost:

Approx US\$3,500.

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Virtual Wedding

Some Amiga users take the Internet seriously. So seriously, in fact, that they are now getting married on it. Mat Bettinson was on the guest list.



The Internet needs no introduction. It's become household name thanks to the recent mass media attention. The Amiga, however, was linked up to the net long before all of this happened, right back when the art of connecting to the Internet required that you have an IQ of 150 and possess a doctorate in computing. These days there's a hard core group of Amiga users for which the Internet is not a play thing, it's a way of life. They may not have been born on the Internet but they look set to live, marry and die there.

Getting to know you

So how do potential soul mates get to know each other? There's several different ways of conversing via the Internet, interested readers should have a look through the Wired World tutorials running since the May issue of CU Amiga. One often neglected method is also the closest to having a real conversation. The Internet Relay Chat or IRC, allows people from all over the world to create their own conferences and talk to each other with 'lag' times of only seconds (hopefully). When a person on the IRC types a sentence, it is sent to all the other participants on the channel. Their name will be listed on the left next to their text so everyone



▲ Here she is: the glowing bride YakGrl.



▲ And the expectant groom Sh'lips. Abbbh.

knows who said what. Once you get used to it, this group communication is far faster than the spoken word ever could be.

In the great tradition of electronic communications, real names aren't used. Instead everyone uses a 'Nick' which is short for nickname. That doesn't mean that their real names are secret, it's just shorter and trendier to use a nick. I use the nick 'Fingers' but anyone using a simple command can call up my real name in a second.

In one Amiga related channel on the Undernet IRC network, a man going by the name of Sh'lips (no prizes for the full nick is) and a woman by the name of YakGrl,

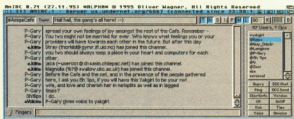
decided that it was time to make their long running electronic love affair official. They announced that they would become .net married. A concept that will seem bizarre to the strange alternative culture that is the Internet.

Even then, many may think that the entire concept is amusing. Such a marriage couldn't stand up legally. The participants aren't even in the same country with Sh'lips based in Norway and YakGrl in the New York. However, why does a marriage have to be a legally binding agreement? Is that all it is? Surely two people who love each other get married to forge a bond

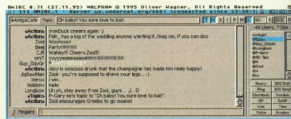
between themselves that they can share with friends and family in the ultimate celebration of devotion? That's the theory anyway. Whether you think these are nutty, net geeks or pioneers of man kind's next step into Internet evolution, one thing's for sure; it was a relief not having to wear a tux.

Virtual confetti

The ceremony was held at midnight on Saturday the 2nd of December (net heads are nearly always night-owls). This wedding got a really the worse for wear after pre-Christmas weekend merriment. Humorous analogies were drawn to scenes in Four Weddings and a Funeral by other members of CU Amiga staff. However, at 11:55 my trusty Hayes Optima 144 dialled up my local Internet provider and I activated a copy of AmiIRC, the Amiga client program used to get onto the IRC. Here's where the virtual wedding differed from a real wedding. The bride and groom arrived dead on time, the best man didn't lose the ring and the bride's mother didn't sob all the way through the proceedings. I even got to munch on a packet of cheesy Doritos through the solemn bits.



▲ P-Gary, the cypherist, runs the moderated IRC channel. Here we see him giving YakGrl voice to say 'I do'.



▲ After the ceremony, there was even a virtual party to be had complete with virtual champagne.

There were plenty of aspects that were just like a real wedding, though. After the rapid and Internet speak modified ceremony, I finally got to perform the ultimate cliché by throwing some virtual confetti.

Oddly enough I really felt like I was at a wedding. There was a dozens of simultaneously congratulatory shouts followed by the crowd screaming for a speech. Speeches were duly typed out in turn by not only the best man but seemingly everyone else who knew the bride and groom and some that didn't. Finally the channel was returned to an unmoderated state so everyone could speak again. The party began instantaneously. Virtual shouting, dancing and drinking carried on through the night while the couple danced to a slow waltz. Another advantage of a virtual wedding is that everyone can play their own music at the same time.

Hawaii

Cramping an entire night's wedding into just 50 minutes or so (BT's profits were ticking over even faster than usual), revellers began to bid farewell to the congregation as the number present in the channel ticked down from the record 85 to a couple of dozen. To wrap up, Sh'lips and YakGirl retired to the #Hawaii channel (amid many cheers) for their honeymoon on the beach. There's rumours of another wedding in the wings and a secret meeting to be held soon seems to indicate that these events may have set a precedent. CU Amiga Magazine wishes Sh'lips and YakGirl the very best. ■

Mat Bettinson



A Mx, Sh'lips's best man.



A Lulugirl, YakGirl's bridesmaid.

Till the .net do us part - the ceremony

<P-Gary> In the name of the net, the cafe and the holy Amiga. :) Time to begin!
<P-Gary> Dear Cafe guests! The net marriage is a blessed union. It is designed and developed and programmed :) by us to brighten up some of our inhabitants' lives.
<P-Gary> We're gathered here today in this Cafe to unite two of our most beloved users. We're here to witness the net marriage of our dear friends Sh'lips and YakGirl.
<P-Gary> I must give the happy couple some words of advice now. Remember that a marriage not only involves sharing the joys and pleasures of your partner, you will also become your partners best friend, and you've got to share his or hers troubles, Caspers, netsplits and lags. Sh'lips, your duty towards YakGirl is to love and honour your wife by seeking her trust, helping her and standing by her side in times of need and trouble. And YakGirl, you have to remember that Sh'lips might act like a big Nordic man, but in reality he needs as much help as you. Take care of him for us.
<P-Gary> We all hope that you will be devoted to each other for many years, and spread your own feelings of joy amongst the rest of the Cafe. Remember - You two might not be married for ever. Who knows what feelings you or your net providers will have towards each other in the future. But after this day you two should always keep a place in your heart and computers for each other.
<P-Gary> Before the Cafe and the net, and in the presence of the people gathered here, I ask you Sh'lips, if you will have this YakGirl to be your net wife, and love and cherish her in netsplits as well as in lagged times?
<Sh'lips> I do.
<P-Gary> Now repeat after me:
<P-Gary> I, Sh'lips, take you YakGirl as my net wife. I promise to love you through both sweet and sour times. :) As a token of devotion I give to you this ring.
<Sh'lips> I, Sh'lips, take you YakGirl as my net wife. I promise to love you through both sweet and sour times. :) As a token of devotion I give to you this ring.
<Sh'lips> May we see the ring, please?
<Action> alfo hands the ring to Sh'lips
<Action> Sh'lips puts the ring on YakGirl's finger.
<P-Gary> Before the Cafe and the net, and in the presence of the people gathered here, I ask you YakGirl, if you will have this Sh'lips to be your net husband, and love and cherish him in netsplits as well as in lagged times?
<YakGirl> I do
<P-Gary> Now repeat after me:
<P-Gary> I, YakGirl, take you Sh'lips as my net husband. I promise to love you through both sweet and sour times. :) As a token of devotion I give to you this ring.
<YakGirl> I, YakGirl, take you Sh'lips as my net husband. I promise to love you through both sweet and sour times. :) as a token of devotion I give to you this ring
<Action> lulugirl gives the ring to YakGirl.
<Action> YakGirl puts the ring on Sh'lips's finger
<P-Gary> Now you two are wed, and thus your names and net lives are going to be connected for ever and ever. Sad things may make you part, netsplits might take one of you away from the other, but he or she will always stay in the heart of the other.
<P-Gary> This ceremony is finally over. We will end with a few wise words, something to consider at this joyful time.
<P-Gary> Every thought felt as TRUE
<P-Gary> Or allowed to be accepted as TRUE by your conscious mind
<P-Gary> Take roots in your subconscious
<P-Gary> Blossoms sooner or later into an act
<P-Gary> And bears its own fruit
<P-Gary> Good thoughts bring forth good fruit
<P-Gary> Bad thoughts rot your meat
<P-Gary> Think right, and you can fly
<P-Gary> The kingdom of heaven is within.
<P-Gary> Sh'lips, you may kiss the bride.
<Action> Sh'lips gives his net.wife a huge kiss.
 and so the merry making, cake cutting, and speeches continue. Sadly we ran out of space so we can't print it all but you get the idea.



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ScreenScene



This month we've been knocked off our chairs by *Breathless*. Visually it's a stunning game but, more importantly, it's a technically demanding

game. It's the beginning of the third generation of first person perspective 3D combat games on the Amiga. The first generation is represented by the likes of *Space Hulk*, *Dungeon Master* and *The Ishar Trilogy*. The second generation, the so called 'Doom' clones, are *AB3D*, *Gloom*, *Fears* and *Citadel*. Now the 3D engines have become more developed as publishers have realised that the AGA Amiga is no longer just a simple 2Mb, 14MHz machine. There are a lot of accelerators out there, and fast RAM is now almost standard. This means that they can give us the games we want, the games that can compete with other formats. *Breathless* is just such a game and it is soon to be followed by others. If you haven't already upgraded your Amiga, games like *Breathless* should encourage you to. See the review on page 46.

The other game which had us really going in the office this month is *Pinball Prelude*. With sure-fire music and a slightly different approach to table design it was a surprise favourite. Who said that 21st Century were the pinball wizards? Effigy have just taken the torch from them.

Team 17 were all excited again this month when they announced that *Alien Breed 3D No.2* is going to be called *Turmoil* and will contain many more advanced features besides 1X1 pixel graphics. According to a spokesman it will have (and I quote in a strong Northern accent) "up and down aiming and transparent characters: you know, the full monty, like". Top news lads.

Alan Dykes, Editor



Breathless p46

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Warning: These previews are about material of an extremely violent nature, do not read on if you are easily offended.

Damage

■ DFR:TBA ■ Publisher: Soumi Peli ■ © TBA

Does seeing blood and guts on screen, witnessing and partaking in callous murder

turn you into a psychopathic mass murderer? Or do you find it all just harmless fun? Where does fantasy end and reality begin. Well Olli Perti Kajo of the Finnish development company Soumi Peli reckons that society has become too boring and we all need some violent stimulation to keep us going.

Going out into the streets and killing everybody in sight is just the tonic according to Olli and doing it on your computer is a damn sight better than

acting out your fantasies in real life.

"Over 200,000 people were killed when we demonstrated our game at a show recently", claimed Olli, which means that my own 250 casualties in the demo were supplied with was pretty puny.

At first glance *Damage* is fairly innocent looking, reminiscent of *Paygnosis' Benefactor*, with small human sprites wandering around a street. Each one is distinguishable as a child, a woman, a man or a granny. Then a small white-shirted hooligan appears and, using a joystick you can walk him or run him around. Now

normally you would try to avoid the civilians and kill some evil ninjas or mafia hit men but not in *Damage*. The first thing you do is get out a baseball bat and start whacking everyone. Women, children, grannies ... the lot.

Pretty soon all that's left is a gory pile of blood and guts on the ground. Next thing you know a SWAT team arrives and start shooting at you. Fear not though, you're pretty invulnerable to bullets and braining one of the old Bill with your bat will yield a shiny new shotgun. Now, to realistic sound effects, you can shoot instead of swing. Later, in possession of such high grade



"DON'T HURT US!" "HELP, HELP!"

weapons as an M60 heavy machine gun and an UZI people will die that faster.

Frankly *Damage* is sick, and after a while running around murdering people it loses its morbid fascination. Graphically this preview version is nothing to speak about and the only gameplay feature is the competition over the amount people you can kill. The full version promises more depth, but apart from shock value I'm not convinced. Soumi Peli intend to sell it mail order. ■ AD

"IN AN OLD CHEST YOU FIND AN M-60 TYPE MACHINEGUN WITH A 200 SHOT BELT! V177U"

Capital Punishment

■ Due Out: Early '96 ■ Publisher: TBA © TBA

There is a very good reason why I think *Capital Punishment* will not be released in the UK in its current form: one of the combatants is a stocking clad woman with her breasts bared through two holes in a leather vest. I

can just imagine the scene in HMV: "My son bought this piece of filth from you last week. Not only does it have blood flying all over the place, but there's a topless ninja in it and just this morning he head-butted a friend while imitating one of the moves. I demand you take it off sale!" We live in a country where

newspapers featuring topless models alongside horrific pictures of murder can be purchased by infants for 25p but combine these in a game and there's sure to be an outcry.

Click Boom have certainly pushed the boat out with *Capital Punishment* and you know what: it's very playable. Hailing from Toronto in Canada, Click Boom claim that *CP* is the bees knees as far as Amiga fighting titles are concerned and on first impressions I'm not willing to discount the theory. The demo we looked was fast and fluid.

The background decor is OK, but what really impresses is the animation. Although the combatant's facial expressions are a bit farcical and their uncovered limbs a bit wooden looking, the frame rate is higher than any fighting game I've seen so far and the moves

are very effective. It's gratuitously gory too.

Although the demo was unfinished, one of the really cool touches already included is the swinging lamp above the fighters.

Click Boom are 'currently in negotiation with various publishers' to bring us this game, and intend to have it released early in the new year. They warn you not to play any demos you see of *CP* if you are under age or of a weak disposition, and the full version will probably have an age rating, but it's not as bad as they would like to make out. ■ AD



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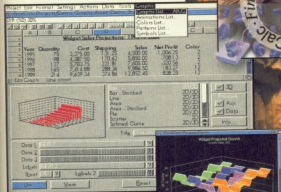
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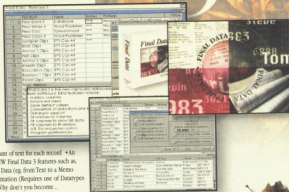
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Breathless

■ Price: £29.99 ■ Publisher: Power Computing © 01234 273000



A third generation Doom clone is here and it's great. Get in the pasta, pop open a Peroni, unclog the Espresso machine, take a deep breath and hold it ...

Fields Of Vison are an Italian development team with close links to their brains. Here is a company that sat down, thought hard about what they'd like to do and then did it. They disregarded the theoretical limits of the Amiga and said something like "we will produce the game we want, and to hell with those too stingy to upgrade". So they did. They produced a 1x1 pixel dream game that needs acceleration but looks spectacular.

OK readers, you can start breathing again.

I won't bore you for long with the details of the plot. You kill or be killed. There are four worlds, each subdivided into a number of levels. The earlier levels are all indoors and have you wandering around dim-to-bright corridors,



▲ "Oy big head! Get outta the way!" I yell foolishly as a heavily armed warrior whom I really should be running away from crosses my path.

opening doors, pressing the Alt (fire) key continuously and running like Billy-o to a shooting vantage point every time a big bad alien with a large gun appears. On later levels you get to run around in fog or run in open air, opening doors and pressing the Alt key even more feverishly, while running away like a rocket

powered Billy-o every time three massive evil aliens attack you with unfeasibly large weapons.

It's great fun, honest. The keyboard is absolutely chocker-block with functions. The keypad allows you to increase or decrease resolution and screen size – a major advantage on less powerful machines. It also allows you to look up or down. There are three angles of each, using the 7 and 1 buttons while 4 centres you again faster than you can say 'doughnut'. While on the move the shift key allows you to slip sideways,



▲ Oh look, it's some bread. Wrong game mateys! Turn left at the M1 and drive to Wakefield.

while Ctrl lets you run. It's all nicely balanced in a right hand/left hand manner and thus control becomes second nature after a short time playing. The F-keys give you access to whatever weapons you have available. Joystick control is available, and top class, but I found it easier to stick to the keyboard as you still have to use it even in joystick mode if you want to change weapons, run or sidestep.

Big weapons

Don't you just love it when game developers get to the point and call their weapons something decent. The weakest weapon is



▲ Top: pick up credits and health wherever you can. Above: In a misty room the bullets from my 'Simple Shot' rip the guts out of an alien fiend. Obsessed? Who me? The recoil death animations are good, as you can see.



▲ One of my enemies indulges in a spot of light celtic jigging while a terrific power belt whistles straight past him. My aim is off and I will die very soon.



▲ Things really like running at you in *Breathless*. The programmers must be fitness fanatics. Some enemies will simply patrol specific zones, others will roam far and wide – and chase you into a corner.

called the Simple Shot. Although the bullets are big enough they don't do an awful lot of damage, especially when you get onto the second level and beyond. I must say I haven't taken the time to count how many bullets it takes to kill a medium sized enemy but it's more than three or four, which always seems to be enough in most of the war movies I've watched. So the simple shot is a bit useless, but it will all have to do 'cos it's all you've got for the first few levels.

At the other end of the scale is the devastating and equally well named Death Machine. This little piece of kit is the equivalent of shooting a burning, explosive filled grand piano at your quarry. But even this isn't enough to down one or two of the blighters.

You can also upgrade these weapons if you have the dosh. At

a certain point on each level there is a red-backed console which acts as a shop. This is accessed by walking right up and pressing the space bar. This will give you several options including Weapons, Weapon Boost and Accessories. You need credits (collected on all levels and usually guarded by aliens) to buy anything, but health, armour and upgrades for all weapons are available.

The main screen is divided up into the playing screen and the icon bar at the bottom. This is by far the neatest presentation of any game of this type so far. The three key readouts are Health, Armour and Energy. Health has a maximum reading of 100 and if you hit zero you die.

The more armour you have (to a maximum of 200) the less health lost when enemy ammo hits you. This also decreases though as you are shot. Energy is *Breathless'* bullets substitute and although there is a theoretical limit of 9999 units of energy this is impossible to accumulate. Write in and tell me if I'm wrong, but you must have one hell of a cheat if you do.

Energy works for whatever gun you use, but the bigger the gun the more energy it uses.

Speed!

I said at the beginning that *Breathless* needs an accelerator. This is not strictly true, although it does play to its maximum with one. We played it on a standard A1200, one with 4Mb Fast RAM added, one with a

Big is better ...

Breathless leaves you, well, breathless when you look at its graphics but with four definition levels and five screen sizes there is a lot to choose from. On a basic A1200 there's no getting around the fact that you either need to play it in the basic 2x2 pixel mode, in which case it looks like *Gloom*, or else you've got to scale the screen down. The problem is that once you use the option of 1x1 pixels you'll never be able to look at a 2x2 screen again. Not only is it less pretty, less clear and a bit cack, it also induces motion sickness. As your eyes get used to the top notch 3D world of full resolution graphics, they'll find it hard to focus on the blocky world of 2x2.

Because of this I was actually happier to play the game on a standard Amiga 1200 at just the second smallest screen size. Yes it was tiny, but it moved fast enough and the graphics were wonderful. Some, though will never stoop this low, so my advice is to upgrade to a decent accelerator with 4Mb of Fast RAM.



▲ In the beginning there were Doom clones with 2x2 pixel resolution, and the people were happy. But the Lord was annoyed about this bit of imperfection.



▲ So the lord did sayeth: thou shalt have very high resolution. And it came to pass that in that Italy Pixel 3D didst listen to him and implement 1x1 in his glory.



▲ This is the standard default screen size. On a basic Amiga 1200 this size with chunky graphics will move fast enough for anyone's liking. So you can have a rollicking good time.



▲ While full screen, 1x1 pixel mode (above) is all very well but if you don't have an accelerator then it's useless. This is a more practical size. They think I'm mad.

28MHz accelerator and one with a 50MHz accelerator. No surprises for guessing what it was best on. But anything will make a difference. I got addicted to the smooth graphics and found it difficult to play in chunk mode so

on the standard A1200 I had to put up with a very small screen. Fast RAM lets you increase the size of this screen, and every incremental increase in RAM and processor speed thereafter improves the game.



▲ Heely, luggy and dangerous. Although gorgeous, *Breathless* rarely strays from the colour grey.



▲ Now correct me if I'm wrong, but if I stay here for more than ten seconds this 'thing' will be using my dead butt as toast rack.



▲ "Looking down into your eyes (come on wing along), I see the future floating past me". One of the many really cool things about *Breathless* is the ability to look up and down, and shoot things in either direction.

Not that it needs much in the way of improvement. I was a bit sceptical about depth and difficulty on the first level, but once you get used to all the moves, start building up weapons and gain some cash to spend in the shop you realise that there is a lot more to the game than at first look. Having been taken in by how good looking *Fears* was, then let down by its playability, I was dubious about



Breathless at first. More concentrated play and the consequent increase in success but it in perspective: this game plays well almost as well as it looks.

Before I go any further though I have to make a comparison with *Alien Breed 3D*. While there is no doubting *Breathless*' graphical superiority I'm still in two minds about whether I prefer it or not. The graphics certainly add masses of feeling to the game and the various enemies are

perhaps more difficult to kill. I also much prefer *Breathless*' presentation: there's no stupid looking rubber glove on the information bar (which Team 17 ridiculously claimed was intended to represent a heart), everything is clear, neat and concise. But *Breed* had a dark atmosphere to it, the likes of which I've only felt playing *Doom* on PC. The creatures look really evil (even if they only look evil in a blocky sort of way) and it sends a tingle down my spine. *Breathless* is more efficient, more business like, but hasn't as much heart (rubber or not), or colour.



▲ A large beast dies and the last of my power belts is wasted. It takes plenty of energy to kill an enemy this large.

An offer you can't refuse ...

Upgrading your Amiga can be an expensive business, but we've teamed together with Power Computing to make it a little bit easier. Because *Breathless* is so demanding of processor power we asked Power Computing to give CU Amiga Magazine readers an exclusive opportunity to purchase an accelerator or RAM board from them at a 5% discount. If you purchase *Breathless* and are fed up with 2x2 pixel resolution or a screen the size of a postage stamp, all you have to do is choose what accelerator you want to buy from Power Computing's advertisement in this magazine and apply for a 5% discount by providing proof that you purchased the game. To qualify for the discount you will have to provide them with a receipt and registration document and also the score box from this review. For more details on this EXCLUSIVE CU Amiga Magazine offer (valid until February 29 1996) contact Power Computing, 44A/B Stanley Street, Bedford MK41 7RW. Tel: 01234 273000.

But ...

With both Black Magic and Team 17 developing new versions of their respective titles to compete, *Breathless* has certainly shook up the scene, like *Gloom* and *AB3D* did in 1995. At the moment though there's nothing like it and I'm following it's murderous path to destruction at every available moment. Once you've seen these

graphics it's difficult to contemplate returning to the old ways. **Alan Dykes**

BREATHLESS

OS Version	3.0+
number of disks	3
RAM	2Mb
hard disk installable	yes
graphics	95%
sound	79%
instability	98%
playability	94%
OVERALL	92%
Big, beautiful and brash. Brilliant.	

Player Manager II extra

■ Price: £25.99 (AGA) ■ Publisher: Anco © 01322 292513

When this game arrived in it was hard to find any difference, apart from the obvious graphical ones and a bit more speed in the player section, between it and the original.

In *PM2 Extra* they've really gone to town, with higher resolution rendered laptops and secretaries, all intended to look cool, modern and sophisticated (presumably). But in fact they succeed only in looking like are dressed up plastic mannequins. If you're going to use renders they have to be used in the right place.



▲ Forget about shirt hangers, just leave a couple of old mannequins in the changing rooms.

Player Manager 2 is most similar to Ascon's *On the Ball*, but the biggest difference is the fact that you can sit down and play the game properly with a joystick if you want. Your aim is to raise a team from division 2 capable of winning promotion to the Premier League as well as competing in Europe. You are pitted against three other managers who can be either computer or human controlled. These guys are pretty smart too.

In terms of options you can do everything from dealing with sponsors to creating new tactics and carrying out specific training programs. Like *On The Ball*, dealing with players forms a central part of *PM2* but there are limitations. You can only renew one contract or buy one player per week and there's no option to give a player a free transfer. It's also not possible, say, to buy a player for money as well as conducting a player swap. These aspects are irritating.

The big change in *PM2 Extra* is that the graphics have all been



▲ Highly original mannequin on beach scenario.



▲ Get out a couple of joysticks and engage in some real gaming action. Forget yer statistics.

upgraded. Each section of the game from the board room to the manager's office is represented with artwork, accessed through the open side of a building and it's all that bit brighter and cheerier. I'm still not happy with the layout of these screens, though. Some of the rooms have very few objects to look at and are a bit of a waste of time, it could have been done much more compactly.

The tactics editor is still brilliant though. If this is your area of interest then *PM2* stands out as the best. Tactics can be created from scratch and it's also possible to move players anywhere on the pitch in a very precise manner.

All in all, *PM2* is a very competent management simulator and if you like the *Kick Off* series then you'll enjoy the *Kick Off* playing engine. However, with *SWOS* now even more management orientated and *Ultimate Soccer Manager* still high in the charts, *PM2 Extra* has a tough battle ahead. Though still a solid game it's not that much better than the first version that warrant an upgrade unless you're a real fan. **MD**

81%

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Speris Legacy

■ Price: £24.95 ■ Publisher: Team 17 © 01924 267776

Look, it's definitely not Zelda, right. No way. Enter a cute adventure game like no other (nearly) and become king if you can.

Have you ever sat back and thought just how ridiculous the plots of most games are? Take *Speris Legacy* for example. A king has two sons. One is evil and twisted and the other is good. The evil one is heir to the throne but because he has black magic rituals in the basement of the castle (playing *Gloom*, no doubt), his father disowns him and makes the good one heir. Not

long afterwards the evil son kills the good son and the kingdom is thrown into chaos. However, the good son luckily made an agreement with a mate that should he be murdered he, instead of his evil brother, would succeed to the throne with the king's permission.

I mean really! Could you imagine QE2 collaring the Prince Of Wales playing *Gloom* in the basement of Buckingham palace, disinheriting him and making Prince Edward heir? Then Charles bumps Eddie off, but to and behold, the young prince has made an agreement with a mate of his to take over the throne if such a thing ever happened? What would the Prime Minister say? What would the London taxi drivers say?

And so yet another game with a hopelessly ridiculous plot ends up packing the RAM on my Amiga, a game which we cover disk demo'd and previewed six



▲ This map allows you to travel back and forth between villages. Cute eh?

Shhhhhh keep it under your hat!

Would the real *Zelda* please step forward. *Zelda* (not at all like *The Speris Legacy*) first appeared on the Nintendo Entertainment System (NES) way back in 1987 and introduced video game players to a world of magic, mystery and danger. The story is based in a place called Hyrule and centres around the Triforce of Power. When Princess *Zelda* learned that Ganon had acquired a piece of the Triforce, she broke it into eight pieces and hid them before she was captured. A young man called *Link* learns of the Triforce and Princess *Zelda* and sets off to rescue both. Since the original version, there was a second game on the NES called *Zelda 2: The Adventures of Link* as well as versions on the Super NES, *The Legend of Zelda: A Link to the Past* and Game Boy *Zelda Links Awakening*.



▲ "You fool, stop biting my knee" the King of Spiritland told the over zealous young adventurer



▲ Cho, what a lad. Kipping in bed while he's supposed to be out chopping down flowers, killing strange Pacman-like baddies, collecting gems and tracking down the bad guy, Galus.

months ago but subsequently fell behind and teetered on the brink of not being released at all.

Are you ...

Yes, *Speris* nearly didn't get released, but Team 17 have given the Amiga a reprieve because of the reception both *Worms* and *Alien Breed 3D* got, and *Speris*, soon to be followed by *Alien Breed 3D Whatever* (AB3D 2 hasn't got a name yet) are the fruits of this reprieve.

The plot is as outlined above, except the hero is called Cho, the bad guy is called Galus and the murdered brother is called Kale. You enter the game with Cho getting out of bed and what you do next is up to you. I mean this. You walk out of his twee little cottage and can wander the length and breadth of *Speris* City for hours doing nothing if you please. Only by talking to people will you get hints at what comes

next and soon a scenario will build up and you'll be off collecting weapons, useful objects and teleporting around the place like a Star Trek veteran.

Apart from moving in four directions (via joystick or keyboard) there are four main interactive functions Cho can execute. He can use a weapon, talk to someone, look at something or pick something up. All of these are accessed by pressing the fire button. Which course of action he will take depends on who or what he is confronted with. Most 'people' (and I use this term loosely) will talk to Cho. Some will have little to say, others will be extremely helpful. However, the baddies, easily recognised as various blobs, mutants, suits of armour and aliens, will not talk so pressing Cho's fire button automatically attacks them. Some of these enemies are devilishly difficult to keep aim on though.

If Cho is able to talk to someone a tiny speech bubble will appear above his head as they approach. Pressing the fire button brings up a text screen which usually contains a menu of statements or questions. Sometimes you will have to choose Cho's statements carefully; other times the conversations will be short. If he can look at something and give you a description a little eye will appear over his head.

lookin' at me ...

To start a fight you need weapons and *Sperisland* is happy to provide you with them at a price. This price will either be lives or money. I say lives because some of the enemies have a habit of knocking energy off Cho and when his energy bar becomes empty you lose a life. To reach weapons you need to avoid or destroy the enemy, the advantage of the latter being that you can collect the gems the bad guys leave behind when they pop their clogs. These will pay for more weapons and objects in the shop and from casual passers by.

Weapons can be accessed either through handy keyboard shortcuts or via an inventory. This is divided up into Weapons and Objects and Cho can use one weapon and one object at a time. Sometimes it is necessary to combine weapons and objects, like hand grenades and matches while particular weapons or objects are required to defeat particular types of enemy or get past specific obstacles. Cho even has at his disposal a pair of *Zelda*-like boots which enable him to travel super-fast. And just so you know that *Speris* is not at all like *Zelda* they're called Speed boots, as opposed to Pegasus boots.

Punk?

Sperisland is a pretty big place with lots of locations and rather too little to do. What I said at the beginning about wandering around aimlessly can stop becoming a joke after a while. *Speris* is difficult, not too difficult, just frustratingly so. There are precious few hints as to what you need to do next and sooner or later the endless meandering begins to wear you down. There is a save option that allows you to enter and leave the game speedily and (I do appreciate these touches you know) if you've forgotten to format a save game disk it will allow you to do this without interrupting the game.

With just average graphics

(some of the characters and objects are a bit blocky) and a tuneful backing track that changes with location, *Speris* is a nice adventure but nothing special. I kept playing it out of duty more than enjoyment, though when you do actually succeed at something it is a hoot. Some of the interaction is funny but a lot is not.

Speris had more potential though. With better interaction more puzzly things to do, allied to more guidance in solving what puzzles there are it would have held my attention much better. ■

Martin Davies



▲ A nice little bit of religion never did anyone any harm, now did it?



▲ Using the shield is effective against haddies but you won't chop down any flowers.



▲ The inventory screen. Cho has got: a sword, some bombs, a shield, a kalle, a pair of speed shoes, a box of matches and a strength potion.

SPERIS LEGACY

Q/S Version	3.0+
number of disks	3
RAM	2Mb
hard disk installable	no
graphics	71%
sound	78%
stability	79%
playability	74%
OVERALL	
A long adventure but short on fun.	74%

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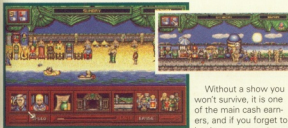
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Hillsea Lido

■ Price: £12.99 ■ Publisher: Vulcan Software ☎ 01705 670269

Look after the pennies and the pounds will take care of themselves. Maybe not in this case.



▲ Above: a busy beach. Icons at the bottom from left: shop, warehouse, beach details, show, promenade, workers, punters, laser: a thriving prom.

A poor man's *Themapark* some might say; and they'd be right. The idea behind both games is the same, you're given a stretch of land and left to use your business acumen to create a thriving resort. However the similarities end there, because *Hillsea Lido* lacks the superb graphics and sound of Bullfrog's *Themapark*. But don't damn the game just yet, it's from the same stable as *Valhalla* and *Timekeepers*, and the latter was a minor hit last year.

It's showtime

It really is all fun and games. To get your resort off to a start you need to book cabaret. There are five wacky acts to choose from for the show, which runs once a week. They're fun to watch and *Hillsea* have kindly provided an option to skip the show if you don't want to sit through it all again. This is handy because there are only a many times you can sit through Basil's *Bendy Ballrooms*. The idea though is that you earn enough cash to book a more expensive show. And the more expensive the show the higher price ticket and the more cash you get your hands on.



▲ The four on the left are the proms: cleaners, cash collector, bill boarder and wide boy security. On the right we have the same except there's a life guard instead of the security bloke.



Without a show you won't survive, it is one of the main cash earners, and if you forget to book one, your outgoings such as staff payments etc will quickly soak up your slush fund and you could find yourself in the spiralling vortex of debt. If you find this too difficult you can always load one of your earlier saves.

Advertising the show is also very important, otherwise no-one will turn up. You can do this by clicking on the little man with the billboard at the bottom of your screen. Other guns for hire include cleaners, lifeguards, a cash collector (invaluable for raking in your earnings) and wideboy security men to protect him while doing his rounds.

Moneygoround

The overall aim of the game is to make the resort as nice as possible so you get lots of visitors who will pay to go to your shows. But the show is not the only way to make money in *HL*. There's a whole host of money spinning items. You can start off small: a few deckchairs for the beach and some donkey rides and Punch and Judy shows for the kids. Then as you make more money you can buy things such as dingy hire, water skis, speed boats and paragliding facilities.

ties. The same goes for the promenade. You can begin by putting a few small attractions here and there: fortune telling machines and teddy grabbers or you can put your business head on and aim to set up postcard stalls, ice-cream shops, coffee shops, fish and chips, all the usual stuff.

This is where the economics side comes in as you get to set the selling price of your goods and your staff's commission. You've got to balance it right. Too high a price and no-one will buy, too low a commission and your staff will be upset. Keeping the shops stocked is also important. A quick call to the warehouse will sort this out, though at times the availability of goods can be unpredictable.

How you decide to manage and plan your resort is up to you. As well as making money you've got to keep your visitors happy. Clicking on the group icon bottom right will quickly tell you what they want next for their beach or promenade. They don't like dirt; if you don't keep the maintenance up on your shops and keep the place clean they'll soon let you know using an annoying *Valhalla* style 'awwww' cry.

As well as keeping things clean for the punters you also need to keep things clean for the health and safety inspector



▲ Our show for tonight: Ladiness in Basil's *Bendy Ballrooms* (see top).

whose visit you are forewarned about by messages which flash intermittently across your screen. These updates let you know what's happening on the other screen. You need to impress the inspector otherwise you mightn't get those lovely cash awards at the end of the week for clean beach and promenade facilities. Other cash awards include length of resort and number of visitors.

HL is entertaining for a while, if you don't mind dodgy sprites and those annoying *Lord Of Infinity* noises. After a while though it becomes boring and ends up being too repetitive without any real reward. The novelty wears off and soon you really don't care whether the show is booked, the ice cream shop is empty or Joe's cafe is filthy. You just want to leave your little people to perish in squalor. ■

Lisa Collins

HILLSEA LIDO

AS50	workbench version.....1.3+
AS500	number of disks.....2
AS500	RAM.....1Mb
AS500	hard disk installable.....yes
AS500	graphics.....50%
AS500	sound.....55%
AS500	fastability.....50%
AS500	playability.....70%
AS500	OVERALL
AS500	Good idea but could have been better executed.
AS500	65%



▲ The shop: here you can peruse the *Seashore* catalogue and purchase some items or just buy some food by clicking on the sand pile.

Pinball Prelude

■ Price: £19.99 ■ Publisher: Effigy ☎ 01526 834020

What about Star Trek Next Generation? What about Judge Dredd? Where are my fave pub pinball tables then, eh Effigy?

Phew! The whole world stood back and gasped when Alternative Software released *Thomas The Tank Engine Pinball* a couple of months ago. At last someone other than 21st Century had caught on to the idea that pinball was big business. Even if a kid's cartoon train was a bit naff as a pinball subject and between it and *Pinball Mania* you weren't exactly spoiled with quality.

Effigy seem set to change this trend with *Pinball Prelude*. I'm not sure whether I like the idea or not but as well as the three tables included in *Prelude* you will apparently be able to buy more on an individual disk basis. According to Effigy if they achieve 2,000 sales they will be able to release a new data disk, 5,000 and a new game will be released.

I guess what I dislike about this marketing approach is that even for £19.99 I would have liked four or more tables. The three supplied are good but you can't help feeling cheated when you open the box and they are already selling more. But I will admit that the idea gets around the lack of availability of pinball games and as long as the quality of the tables keeps up then, well, what the hell.

Past, present ...

The three tables supplied in *Pinball Prelude* are themed around the past, the present and the future. The past and future are almost unrecognisable as conventional pinball tables. I mean come on, have you ever played pinball with four cavemen clubs or five light sabres? But they're fun.

The 'Prehistoric' one is a simple



▲ Above: 'Future' ... cloudy, polluted and staffed by robots. Above right: The rather odd 'Prehistoric' table.

affair but easily one of the most scenic table I have ever played. It's like taking a stroll through Jurassic Park. Although pinball purists won't be excited by the gameplay the combination of humour, top class music and SFX and novelty value will not really disappoint anyone. Instead of loops, alleys and bells it contains grunting dinosaurs (a T-Rex skull and a Tricerops) a river and a series of symbols on a grassy knoll indicating passing time, spinning vortexes and inventions. Congrats, Effigy, on making a break with tradition and succeeding.

The 'Future' table is even more bizarre, with a top-down view of a Blade Runner-esque rendered city and what is described as a ball droid, which looks a bit like a

coloured marble. The best bit are the flippers: they're green light sabres! Smart. The SFX used mean that whenever you move a flipper it makes a pretty genuine Star Wars light sabre sound. Despite these innovations it's the least enjoyable of the three tables.

The 'Present' table is much better. It looks like a current pinball table, which means you're on familiar ground immediately. It's themed around communications with a satellite dish, a TV remote control (or is it a mobile phone), what looks vaguely like a laptop computer and a football match. One of the really nice touches included is that when the ball enters the football match section it actually changes temporarily into a football. Otherwise though the ball doesn't look very convincing.

The music and sound effects are without doubt the best in any pinball game. If you buy it, do yourself a favour and plug it into a stereo because you won't regret it. You can individually change the volume of the music and sound effects, getting the right balance for your tastes and there's also a switchable filter which smooths out the sound and cuts out some of the higher frequencies.

It's not easy to score highly in *Prelude*. Unlike say,



▲ The 'Present' table. All tables scroll smoothly up and down, left and right. Hey, it's a goal!

Illusions, where you can blast away almost aimlessly and still chance upon 20,000,000, in *Prelude* you need to work the combos and pick up multiballs to really get results. There are three difficulty levels.

Original thinking

I was highly impressed with *Pinball Prelude*. Each table comes on a single, separately loading self contained disk so there is no swapping between games etc. The quality of the graphics is very good and the amount of original lateral thinking used on the various tables is admirable. In the final analysis I found that the tables lacked really long term excitement (especially 'Future') and the sort of edge that a genuine pub pinball table provides, but don't let this put you off. It's much better than *Thomas Tank* and knocks the socks off past masters 21st Century's *Pinball Mania*. And when you beat the master, the world is at your feet. Or something. ■

Alan Dykes

PINBALL PRELUDE £19.99

OS version.....	3.0+
number of disks.....	3
RAM.....	2Mb
hard disk installable.....	no
graphics.....	87%
sound.....	93%
stability.....	82%
playability.....	82%

OVERALL
More Pinball!
More MORE!

84%



POST & PACKING	1
AMOUNT ENCLOSED	2

Soccer Stars '96

■ Price: £34.99 ■ Publisher: Empire Interactive © 0181 343 9143



If there's one thing better than a football game, it's a box full of 'em. Matt Broughton opens his present from CU Amiga and writes a Thank You note to Santa.

Though the Amiga's game software has been a bit unpredictable over the last few years, one genre that has always had a steady stream of releases is the soccer simulation. Empire Interactive have, in their infinite wisdom, recognised that there are tons of excellent footy products out there, and as such have put four of them into one box and offered it to the punter at a bargain price. Of the four there's only one I consider to be less than spectacular, so let's get that plod out of the way first!

Just one stinker

ANCO's *Kick Off 3: European Challenge* is, in my books, sadly lacking. Going for a side-on view, it's the only game out of the four that I could hardly be bothered to play (but I did 'cause that nice Mr Dykes pays me in turnips he do). It's got pretty much all the content you'd expect from such a product, only really wobbling once the arcade matches start. The feeling of being in control is slack, and there are just too many silly problems that make playing the game a drag. It also fails that age-old test of seeing whether you can score every time from a diagonal shot. Not one I'd recommend, however...

Moving on to more positive issues, we come to the four disks of love known simply as Ascot's *On The Ball*. Now *OTB* is a bit of an anomaly, as it's a management-only game, but one that I love. The reason for this is all down to the presentation. Rather than being presented with dull, lifeless screen upon screen of text results and



▲ Premier Manager 2: excellent management game.

static statistics (you try saying that with your mouth full) each section of the game is accompanied by some gorgeous animations and player representations. Train the team and you'll actually see the little fellas running about on the pitch. What's more, they'll actually be practising whatever you've assigned them, passing, shooting, penalties, whatever! Add to this the actual match graphics featuring huge and colourful players moving around with grace and finesse, and you're onto a winner.

To cap it all, it's not just the appearance that draws praise; the content of the game itself is also worthy, with absolutely everything you'd expect from a management game. Certainly there are screens full of boring player stats, but with pretty backgrounds! (and let's be honest, that's what sad, hard-to-please managers like me are after at the end of the day).

Suffice it to say that this is the management game to go for if you hate the standard style adopted by such games. Which brings me (like a trained BBC anchorman) to our



▲ FIFA: good footy action.

next contestant... Gremlin's *Premier Manager 3* (and let's not beat about the bush

here) the third in the *Premier Manager* series (and I bet that was a shock to many of you!) *PM3* is a sort of halfway house between the text manager and the colourful likes of *On The Ball*. It relies more on statistics and traditional management antics for the majority of its content, but thanks to some excellent presentation, still keeps things looking groovy throughout. Another bonus in *PM3*'s pants is the way in which it represents the actual matches. Fairly obviously, there isn't an arcade section within the game, but a pitch is still shown, charting the progress of the ball and players at a speed you set. As with all management games, how much you get out of a game really depends on how much you put in, but with *PM3* you can get right down to the level of knowing each team member intimately. If you're the sort who just likes to buy players occasionally and do the old bit of messing around with formations before pressing the button to get the result - fine. You'll have some fun, but you won't get as far as the manager watching all of his players

and negotiating with contracts and other club managers. Still, damn good stuff in either case.

And lastly we have EA's *FIFA International Soccer*, as good a version of FIFA as you'll get on the Amiga. It's an isometric-viewed soccer game and

though a tad slow when compared to the likes of the mighty *Sensi*, it allows for some excellent play and a high level of control. The player looking for trick shots and tasty headers should find something to suit his taste here. And, er... what more is there to say? It's brilliant.

Excellent

And so, my CU chums, this package is an excellent one. Forgetting *Kick Off 3*, everything is highly recommended; with two very different but excellent management games and one superb arcade game to get into. Empire Interactive - I thank you! ■

Matt Broughton

SOCCER STARS '96

- benchmark version.....A1200
- number of disks.....12
- RAM.....2Mb
- hard disk installable.....Varies

graphics.....	na's
sound.....	na's
playability.....	na's

OVERALL
An excellent
compilation
featuring
some classics.

91



There's nothing that our own Queen of Darkness likes doing more than solving adventure games. If you're stuck for an answer, why not drop her a line and let her get her teeth into something juicy?

Future Wars

I have been unable to get out of the office (the room with the map). And that's only the second room! Please help.

'Name and address withheld to avoid embarrassment.'

Here's a walkthrough for the first bit. Take bucket, operate open window, examine wastebasket, get plastic bag, go to bathroom, open medicine cabinet, take insecticide, open toilet door, examine floor, get flag, use bucket on sick, go to north in office lobby, use bucket on north door, walk to east door, examine carpet, take key.

Operate east door, go east, close door, examine cupboards below library, use key on second cupboard from left, examine typewriter, note number, operate drawer in desk, take paper, close drawer, examine military map, put flag in hole in map.

Leisure Suit Larry 3

As Patti, I'm stuck trying to find Larry in the bamboo forest. I have the bottle of water, but the manual says I need nectarines. Help!

Mr Preece, Mid Glamorgan.

Adventure Helpline

It's not nectarines you need it's a song. If you look in the game's manual you'll find the one I mean. The answer to the maze is to use the first letter of each word like this: North, north, east, east, north, west, north, east, north, north, west, south, west, west, north, north, west, north. (Don't drink any water until you get to the point where you have become delirious and lying on the ground.) When you emerge from the forest at the other end you must travel north to reach the river where you can have a drink.

Secret of Monkey Island II

I am really stuck in this hard game and I can't find the 4th piece of the map.

Daniel Stubbs, Dover.

Go to Booty Island and take part in the spitting contest. (Don't males have some disgusting habits. I can only be grateful it's not the other contest that males all take part in. The one where you write your name in the snow)

Mix blue drink with yellow drink. Blow ship's horn. When Spitmaster is away pick up flags and switch their places. Use the green drink with the crazy straw and go to the Fault Line. When you see the woman's sash flap in the breeze, spit once and collect the prize. Take the prize to the shop and sell it for 6000 pieces of eight. Try to buy the map, then do the deal to find 'mad monkey'. Go to Phatt Island, to the library, and look under D for disaster in the card index. Ask librarian for the book Great Shipwrecks. Read book to get the co-ordinates. (33N, 89W) Hire Captain Kate's boat and go to the co-ordinates. Dive to the galleon and get the monkey head. Take your prize to the shopkeeper.

Dungeon Master

I am having trouble opening two doors on Level 6 - the one with

the Riddle Room. One of the doors is near to the 'Test Your Strength' corridor.

I'm also having trouble opening an iron gate. I'm sure that the answer is something to do with throwing something through the holes in the gate which is then magically transported back to you. It used to work, but it doesn't work now.

Peter Bowers, Oldham.

You simply pick your strongest character and get him to throw something down the corridor to land on a pressure plate which opens the door. If you are wandering around with a gang of wimps then you should first give one a strength potion to drink.

The gate problem is solved by operating the wall lever then placing an object in the transporter field which appears. This opens the gate and gets you the key.

In the corridor with the message, If you want to stay alive soon after entering the room there is a button to press which opens a secret room on the far left.

There is also a room which opens when you step on a pad, then closes when you get off. To enter that room you must lure a skeleton onto it, then freeze the rascal with a magic box.

Operation Stealth

I have got as far as swimming through three screens when I come back to town (after breaking out of the cave). I have spotted a man on the beach, but I have no money to enable me to buy from him. Am I in the right place? Should I have done something first? I have obviously missed something, but what?

Mark Russell, High Wycombe.

You've obviously broken the first rule of travelling - 'Take twice as much

money, and half as many clothes.' I take very few clothes with me when go on holiday and I find I have a much better time.

Do you recall that when you went to the bank to convert your money into local currency you 'used' the notes on the banknote? Well you should have done it twice.

Remember, boys and girls, if a thing is worth doing, it's worth doing twice! But then I say that to all the boys.

Simon the Sorcerer

I am stuck at the part where you have to find stew for the Gollum and I cannot find the stew anywhere. I know I need to make an axe, but I cannot find anything to make an axe from.

Rachel Cook, Peshawar.

To start with you must have the specimen jar from the Druid's house in the village. Once you have that you can go to the Swampy's treehouse and he will give you all the stew you want. Ask for another helping and store it in the specimen jar. Keep eating stew until he leaves.

The axehead is made out of the mithril ore which the paleontologist will find for you if you first find a fossil in the icy wastes using a metal detector. ■

"If all the boys lived over the sea. What a good swimmer Vampyr would be." If you've got a little problem and would like Vampyr to help you out, drop her a line at CU Amiga Magazine, Priority Court 30-32 Farrington Lane, London EC1R 3AU.



REMEMBER, THERE ARE THREE KINDS OF PEOPLE: THOSE WHO CAN COUNT AND THOSE WHO CAN'T.



Time flies by when you're having fun, eh? It seems like only yesterday I was writing Snip Tips and here they are again already! Tsch, they grow up so fast these days. Or something.

PREMIER MANAGER 3

Gremlin Interactive

We're forever getting calls about these bloomin' phone numbers, so here are a couple to keep you going, courtesy of Matthew Rix from Huntingdon.

343343 gives you £1.2M.

400040 gives you players a fitness rating of 99, a moral of nine, and makes them able to play with both feet.

FEARS Black Magic

David Swann from Birmingham has a nice little cheat for this interesting Doom would-be.

First get your ammo level one to 18. Next go and stand in some lava and press the help key. Now die! Restart the game and the help key can now be pressed to restore all your health and ammo. Yahoo!

ATR Team 17

If you've ever fancied having a go at the rock-hard space levels without having to complete all of the earlier tracks, have a bosh at this cheat, courtesy of Swindon's

Snip Tips



LEVEL 9 —
NZY95DBR9Y6

THEATRE OF DEATH Psygnosis

Did you know that Psygnosis is now called Sony? I know. Crazy isn't it. Anyway, a nice simple little cheat this, all courtesy of one Liz Jones from Middlesex. Type in SHED SOFTWARE as the level code for infinite ammo. Groovy huh?

GULP Ice

Oh lordy, I thought I could forget about this game forever! Never mind, it's only level codes (well that's what my therapist says anyway — apparently it'll make those strange dreams go away!) Jesus, I talk a right old load of rubbish don't I. Er, anyway, here are the codes I mentioned about half an hour ago before wandering right off the subject. Oh yes, I forgot to mention, this is all thanks to Paul Milton from Cheshire. Ta fella.

THE LAB LEVEL
WILLOW
BROOKS
KARLOF
B-MOVIE
JEKYL

THE SEA LEVEL
SCALES
SALMON
PIRATE
SEAGUL
WWORLD

THE TOY LEVEL
PENCIL

Paul Lee. Select Battle Mode and pick the Forest Track. Chose to race on track two using the Formula One car, and then play a two-player game, letting player one win all the races. When you return to the title screen, select the Battle Mode but this time you'll be able (hopefully) to select the Space Tracks.

ZEEWOLF Binary Asylum

Paul Adams from Chichester has a few level codes to keep things moving while you wait for Zeewolf 2.

Mission 5: IMAGO
Mission 9: TIBURON
Mission 13: ARGUS
Mission 17: MARTEN
Mission 21: SOCKIN

JUNGLE STRIKE Ocean

Cripes! Not only has John Slint from Dagenham sent in some handy level codes for this excellent game but they happen to gift the player with some sixteen lives. Yes! Quite remarkable!

LEVEL 4 — XT6YXL6PF6M
LEVEL 5 — VNHYYWGMZBC9
LEVEL 6 — WSFXW4MPYHJ
LEVEL 7 — THPD96PGCLN
LEVEL 8 — N4SC3756MWB



SKATES
VISION
GNOMES
PUPPET

THE SPACE LEVEL
AMORPH
GALAXY
ALARMS
PHOTON
LASERS

THE ALIEN LEVEL
RIPLEY
HUGGER
NATION
T-2000
ENDTHE

POWERDRIVE US Gold

Now here's a handy set of codes and no mistake! Ta to a mystery reader who didn't include their name, but comes from Dorset. Don't forget, if you don't tell me who you are and what machine you've got, you won't get a prize!

STAGE 2 — BLJULCB-
MMBBB1UDLXMHCH
STAGE 3 —
CBGCSFM8MBBCWSQ3XMH5
STAGE 4 — D2PB2LFX-
QBBB2GU4XMHN
STAGE 5 — CLJBUCXFQBB-
CLG2XXMHX
STAGE 6 — BUPB0FFQBBDD-
WWYQXMHM
STAGE 7 —
BQDUJB2VQBBLNCHXMH8
STAGE 8 —
CGCBNGBV3BBCJBD5XMHJ
STAGE 8.2 —
B2DULB5F3BBCZD7TXMHJ

And that's your lot. Don't forget, every tip printed receives a free chunk of Hit Squad software thanks to those groovy guys and gals at Ocean, so keep 'em coming. Be seeing you ...

Get Serious

Horgan's Organ



It's been another good month in Amigaland, especially if like me you've been fortunate enough to spend the past few weeks checking out the latest kit on the

market. The highlight of my month has to be HiSoft's new CD-ROM pack. This includes one of the few CD-ROM drives on the Amiga market that can shovel audio data across the SCSI bus. "So what?" you may be thinking. Well it means that you can take samples directly from CDs in a straight digital to digital conversion, hence no signal loss until you start downgrading to 8 bits, and even then the results are still amazing!

We've also had plenty of fun with the Virtual i-glasses but at the moment there's not much around in the way of 3D software. Even so, hooking into your favourite PD demo is pretty intense!

We've found room on the cover disks this month to include lots of little bits and pieces as well as the main Texture Studio program, because we know you're not just interested in one thing.

Now that Christmas has come and gone, let's hope that Amiga Technologies get on the case with a new beefed up Amiga to tide us over until the next generation machines. Perhaps they will at last start selling the A1200 in a hard drive-only configuration - until then we are going to be stuck with a market held back by an underpowered userbase - fingers crossed!

Tony Horgan
Technical Editor

Once again we're here with all the latest products rated by CU Amiga Magazine's gurus ...

● Disk Magic 62

File managers used to be simple little things that helped you copy between a couple of disks - now they want to run your life for you!

● HiSoft CD-ROM 65

Hi-Soft's new CD-ROM bundle includes a few CDs and a smart CD-ROM drive which among other features, allows for direct digital recording from audio CDs.

● i-glasses 69

Virtual reality for your Amiga? Escorn's i-glasses offer a personal 3D view of your Amiga, for a price.

● GP Fax 70

Traditional fax analogue to digital fax machines are old hat these days. Why not send your faxes straight from your Amiga via a modem?

● OctaMED CD 74

OctaMED needs little introduction, but now the Amiga's favourite music software is available on CD-ROM, with over 500MBs of top samples and modules!

● Kryonix Imagine Objects 76

How do you fancy some new dinosaur objects for last month's brilliant Imagine 3 cover disk? This CD makes no bones about its offering.

● FourSquare HD Floppy Drive 79

It's sexily flat and covered in a matt black finish - it's a high density floppy drive!

● CD-ROM Round Up 80

UFO theories, graphics clips and more Amiga archives are unearthed this month.

● PD Scene 82

They've all gone game ga-ga down at PD Scene central - plenty of cheapo entertainment to see you through until Spring.

● PD Utilities 87

Betting tools, a graphic adventure creator, more lottery bits and plenty of miscellaneous utilities.



i-glasses - page 69



CD-ROMS - page 80



PD Utilities - page 87

DiskMAGIC

■ Price: £39.95 ■ Developer: Maxon Computer GmbH ■ Supplier: HiSoft Systems ☎ 01525 718181



Need to keep your files in order but don't like the Shell? DiskMAGIC will sort it out for you ...

Almost everyone who uses their Amiga for something other than games will have used a file manager at one time or another. At their best, file managers offer the power and flexibility of the Shell with the user-friendliness of the Workbench. There's plenty of choice in this field (*Directory Opus*, *Info Nexus*, *Directory Work*, *FileR*, *SID*, *CLIMate* etc.) and they're all based around the same basic structure of two listers, one for the source directory and another for the destination. Simple tasks would be copying files from the source to the destination or running programs. More advanced uses could include all kinds of things such as viewing animations, unpacking archives or even launching custom-written *ARexx* scripts.

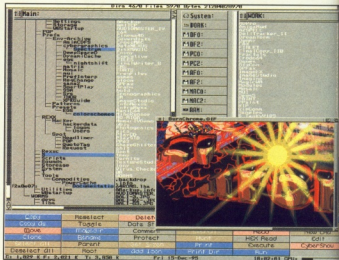
So *DiskMAGIC* is entering a crowded market with *Directory Opus* already a permanent fixture on many Amiga user's hard drives. However, whilst *Directory Opus* 5 added lots of powerful features, it alienated some users

with its move away from the familiar two-lister display. Maybe this is the break *DiskMAGIC* needs to claim the high ground midway between ease of use and powerful functionality.

Firing up

DiskMAGIC comes on a single disk with a 160 page manual. The first time you fire it up you're greeted with the traditional two lister filer with a bank of drive buttons in between. Beneath this is a bank of picturesque icons depicting the standard operations such as Copy, Delete and Move.

Modelled in the famous *Workbench* style, the icons are nicely shaded but it's not immediately obvious what they all do. A quick glance at the manual is enough to clear this up. Once you know what they are it's easy enough to use, although they're all very similar to look at (mostly



▲ *DiskMAGIC*'s excellent directory tree can be seen here. It makes it easy to find some files hidden within subdirectories which you can then view with *CycleScan*.

cameo pictures of the main screen overlaid with little arrows or symbols). Fortunately these can be redefined to text buttons or your own personally designed icons.

Options, options

Whether it's the buttons you want to change or any other aspect of the program, there's no shortage of configuration options. The selections from the configuration menu are as follows: Devices; Directories; Display; Drag 'n Drop; Filetypes; Functions; Gadgets; Hotkeys; Icons; Menus; Mouse; Requesters; Screen; Startup; Status Bar and Viewer. Each selection has its own control window and menu bar, from which all the relevant settings can be made.

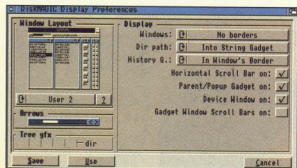
Altering the buttons and defining new ones is one of the most obvious changes you will want to make. Setting up a new button is fairly simple, although adding your own icon can be a little more tricky. You can load in IFF brushes and tag them onto buttons, but you'll need to match up the palette of the IFF clip to that used

by *DiskMAGIC*, which can be fiddly. The text button option is bar far the simplest route.

Musical windows

If the standard display setup isn't to your liking you can move each element wherever you like. Before you go rearranging all the windows, listers and buttons, it's worth checking out the alternative pre-set layouts. By cycling through a number of thumbnail screen shots you can choose a completely different layout with a couple of mouse clicks.

Alternatively you can get your hands dirty and move each part around the screen to suit your specific requirements. When you're happy with the new layout, you can choose to have the windows 'set in stone' so that you can't accidentally resize or move them next time you use the program, although you can revert to any other layout should you wish to. The result is a tidy fixed window filer exactly how you like it. Otherwise you can



▲ In the Display preferences GUL, the user can choose between various preset window lay-outs with a small preview window showing the result. Also here the actual lister windows can be fixed in place here.

Virtual LHA

If you use LHA archives on a regular basis, you'll welcome DiskMAGIC's excellent built-in LHA support. Apart from packing and unpacking LHA archives, it also allows you to work on packed archives as if they were unpacked, copying, deleting, viewing and playing files without the need to expand everything first. The program does all the fiddly bits for you behind the scenes. You just access the archive as if it was a directory. This means that you could lift a single file from a CD-ROM archive without extracting the whole lot beforehand. It's possible to do the same in *Directory Opus* if you have the right ARexx plug-in, but DiskMAGIC does it straight out of the box! DiskMAGIC is equipped with a good ARexx port to boot.

DiskMAGIC also has about the best built-in file type support I've seen in a directory utility. The automatic DMS handling is very handy. Add to this the powerful and intuitive file type recognition coupled with the relatively easy to use functions editor and virtually any type of file can be defined to perform any kind of action when clicked upon. Setting it up for use with specific viewers, players and so on is no problem, yet it has enough built in to be useful with no extra configuration, unlike *DOPus*. Performed in the excellent graphical environment that DiskMAGIC provides, it still didn't seem a hassle to spend a couple of hours creating the ideal filer environment for my needs.

save the new layout with standard movable windows.

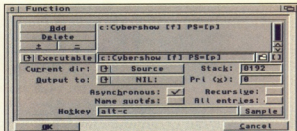
In addition to the list of currently mounted drives, you can also set up a bank of drive buttons for your main drives, directories and partitions. Creating an attractive and functional drive bank takes no time at all. Fonts for each part of the program can be redefined to any that you may have on your system and altering the palette is no trouble.

Borrowed from Opus

A fair bit of the DiskMAGIC system looks remarkably similar to *Directory Opus* – the section dealing with defining new buttons for example. Although you won't need to use the Shell very often once you've configured

DiskMAGIC to your needs, you will inevitably need some knowledge of Shell commands in order to program new buttons. However, the process is simplified somewhat by the button configuration GUI. Apart from entering the path and name of the relevant commands or programs you want to call from the button, you also need to set vital parameters such as whether DiskMAGIC should wait for the command to return, finish off a function definition and so on. It could hardly be easier to create a special button for your favourite text editor and picture viewer. Very tidy indeed.

Some other special features of DiskMAGIC are definite improvements on the genre. The Mac/Pc style Directory Tree mode can be toggled on and off. This enables you to view entire directory



▲ This is where you can edit functions. My custom CyberShow button activates the viewer and passes it the name of the file I want to view.

structures including sub directories and files all at once. This is a superb function that makes finding and handling files a doddle with far less shuffling in and out of directories.

The positions of the tree elements can be dragged around with the mouse to peek under every stone. The price you pay for this is longer access times while it reads the directories and subdirectories – understandable but perhaps it still could be quicker. Wonderful stuff all the same.

Slothenly pace

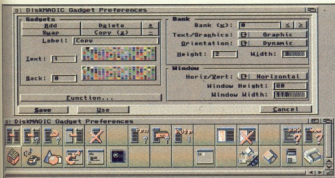
There is however a few key areas in which *Directory Opus 5* sneaks past DiskMAGIC. The most obvious is the rather lax pace at which DiskMAGIC carries out certain tasks. Making a simple change to one of the preferences GUIs results in a 10 second wait for it to 'Copy Preferences' whatever that may be. This rapidly adds up to be a little frustrating for frequent minor changes of the configuration. Also the file copying functions seem to be slower than any other file manager I've used – so much so that I called HiSoft to confirm that I wasn't doing anything wrong. They admitted that it was on the slow side but said that this and some of my other criticisms are being addressed in future versions. Good to hear that DiskMAGIC will be continually developed as *Directory Opus* has been itself.

I couldn't flatly recommend either *Directory Opus 5* or DiskMAGIC either way. *DOPus 5* is the more powerful in terms of efficiency, speed and the multi threaded nature which allows for multiple listers and simultaneous processes. If it's raw copying performance and the

capability of parallel operations and even a Workbench replacement you need, then *Directory Opus* is your man. DiskMAGIC has the edge when it comes to ease of use and built-in support for many handy features and an uncomplicated configuration style, not to mention being a tenner cheaper. DiskMAGIC, unlike *DOPus*, starts simple and can become as complex as you want to improve on your configuration, whereas *Directory Opus 5* starts complex and you have to learn the ropes in order to make the most out of it. There's no doubt that DiskMAGIC could have the edge if it was quicker.

I almost wish the difference was more clear cut so that I could use one or the other myself. As it is I'll be loading up both for different tasks. *Directory Opus 5.x* is just around the corner and new updates for DiskMAGIC are touted soon. It looks like GP Soft finally has some worthwhile competition and though it'll mean beads of sweat on both developers' foreheads, it'll be good news for us as we benefit from the competition. DiskMAGIC is a truly professional product and one purchase that I can definitely say you won't regret. ■

Mat Bettinson



▲ The Gadget preferences can either edit graphical buttons as shown or text gadgets like other disk filers. Clicking on the Action gadget will allow editing of the custom function activated when a button is clicked on.

DISKMAGIC

System requirements:
Any Amiga with Kickstart 2.0 and above with 1Mb of RAM free.

A500	base of use	95%
A500	Top marks, the best of it's kind.	
A1200	performance	89%
A1200	The features are excellent but the speed that they are executed can be a problem.	
A1500	value for money	82%
A1500	A slower class than the already cheap Directory Opus 5 is a steal for sure.	
A2000		

OVERALL
A directory utility oozing class by the bucket. Get it now.

92%

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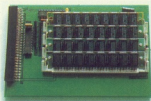
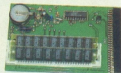
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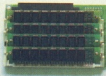


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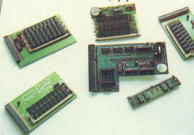
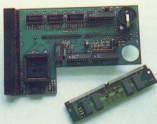


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Squirrel SCSI Sony CD-ROM

■ Price: £189 ■ Developer: HiSoft ■ Supplier: HiSoft ☎ 01525 718181

A very appealing CD-ROM pack arrives with powerful audio and video CD capabilities.

Now that a CD-ROM drive is considered an essential addition to most Amiga setups, HiSoft have released a new CD-ROM and SCSI interface package for the A1200 and A600.

For your money you get a Sony 24 speed SCSI CD-ROM drive, a Squirrel SCSI 2 interface, two CDs (AGA Experience and Aminet 9) and three floppy disks worth of support software.

The drive itself is reassuringly solid. It comes with an internal power supply and a robust 'kettle lead' type mains connection. Compared to the fiddly and rather weak external power supplies of some other drives this is a welcome sight. Due to the internal power supply there's also an in-built fan. A SCSI ID selector can be found on the back of the unit and

is easily adjusted should the need arise. A stereo audio output is also on the back panel, but there's no provision for channelling your Amiga's sound through these connections, so a bit of cable swapping may be in order if you plan to alternate between listening to your Amiga and music CDs. A SCSI terminator is also supplied.

Extra bits

The two CDs included with the drive coincidentally both scored 90% in their CU Amiga reviews. *The AGA Experience* (reviewed in the December 95 issue) is a collection of public domain games, demos and slideshows, with a few utilities and other bits thrown in for good measure. A lot of the content is ready to run direct from the CD which makes the disc extremely accessible. *Aminet 9* (reviewed on

page 80 of this issue) is the latest collection of shareware from the Aminet archives and is a valuable resource of both serious software and entertaining PD.

There's enough on those CDs to keep you going for a while, but HiSoft also supply some more goodies on three floppy disks, including the Squirrel SCSI software, a few CD tools (see panel) and miscellaneous additional utilities.

Great value

This particular bundle has a number of advantages over similar offers you may have seen. For one thing it's all based around SCSI connections (unlike the forthcoming Amiga Technologies



▲ HiSoft's new CD-ROM package is based around this rather nice Sony CD drive, kitted off with that fetching Squirrel logo. New case.

Q-Drive) which is good for future expansion options. Then there's the robust built quality of the drive and its ability to read audio data from CDs and VideoCD compatibility. Add to that the software that's included for no extra charge, and you've got a very good value deal on your hands. The pack comes highly recommended to all Amiga users, especially anyone who's into sound sampling. ■

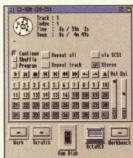
Tony Horgan

Direct audio sampling

One of the key features of the Sony CD drive is its ability to transmit data from audio CDs across the SCSI bus. In other words, with the right software the Amiga can suck the 16-bit sample data from any audio CD through the interface and into memory, where it can be manipulated, edited, replayed, converted to other formats, saved to disk and loaded into your favourite music sequencer software.

Grabbing the actual sample data in a direct digital to digital copy means that the sound will not be degraded by any interference. If you have the luxury of a 16-bit sampling setup, you can import the grabbed sections straight into your sampler with no loss of quality. Users of 8-bit systems can convert the data to 8 bit and then carry on as usual. *OctaMED* users can load in the 16-bit originals, maximise the sound to noise ratio and process them in 16-bit format before converting to 8-bit or replaying them through *Tocatta* or *Aura*.

There are a couple of utilities included on the floppies designed for this purpose (one called YACDP and another called CDDA1.2). It's also worth checking out *AudioLab 16* which is similar to these two but more advanced. You can find a 'Junior' version of it on the *Aminet 7* CD. We do not condone sampling from copyrighted audio CDs and advise you check the copyright status of the tracks before sampling.



CD-ROM PACK

system requirements:
A1200 or A600 essential. Hard drive recommended.

ease of use.....80%
Setting up the software is simple enough for most users.
performance.....90%
The Squirrel interface works very well with the drive.
value for money.....89%
Probably the best CD-ROM buy that there is for the cash.

OVERALL
Highly recommended to anyone seeking a CD-ROM drive.

89
0/0

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Virtual i-glasses

■ Price: £586.33 ■ Developer: Virtual IO Systems ■ Supplier: Amiga Technologies ☎ 01628 770034

Get ready to enter the third dimension with the official Amiga virtual reality headset.

The idea of total immersion in a computer-generated environment is at the same time appealing and slightly unnerving. If you were to believe the Californian techno hippies that keep cropping up on late night TV documentaries, we'll soon be leading most of our lives in the virtual world, with offices and social centres replaced by 3D virtual equivalents, and who are we to argue with them, even if they do wear open toe sandals? For now, though, the closest you'll get to that with your Amiga is with these new Virtual i-glasses.

The Virtual i-glasses are currently available in two forms. The first is PC-compatible only, but features motion sensors that convey your head movements to the computer. A similar model is in production for the Amiga but at the moment the 'Video Version' of the glasses (with no motion detectors) is the only option for Amiga users. These plug into the composite video output of the Amiga. This means they can only be used with the A1200, A600 and CD32, as no other Amigas have a colour composite video output. A500 and A2000 owners can use them but will see only a mono display. The i-glasses can also be

connected to the composite video output from a VCR.

Seeing double

Even though these i-glasses cannot detect head movements, they can display 3D images. However, the i-glasses do not automatically transform a 2D image into 3D – a specially processed 3D video source is required for 3D viewing (standard graphics and video appear in 2D). In reality, our perception of 3D vision works because the view from the left eye is slightly different to that from the right eye. The brain subconsciously combines the two views into a single 3D view. The i-glasses simulate 3D with two small LCD screens, each showing a slightly different picture to the other. See the panel bottom left for more details.

You might expect the glasses to fill your field of vision, but unfortunately this is not the case. The two screens merge together to form a single rectangular image in the middle of your gaze. Although this is quite a size, it's far from the 180 degree vision that you may have anticipated. The official specifications state a 30 degree field of vision for each eye. A detachable black visor helps to reduce

distractions from the real world creeping in and after a short period of use, the continued focus on the screens seems to psychologically enlarge the picture somewhat. Without the visor, the display appears semi-transparent.

Picture quality

Picture quality is fair. The resolution of the screens is quoted as a total of 180,000 pixels for each LCD screen, which equates to a display of around 490 x 368 pixels. This is insufficient to read text from a standard Workbench screen but is good enough for games. A little LCD 'afterblur' creeps in on smooth scrolling games but the refresh rate is fine.

Stereo sound is provided by a pair of small Walkman-style headphones. These are attached to the side of the headset, suspended on short shafts of their own which can be swivelled and rotated to fit different head shapes and sizes. At least that's the idea, we found them uncomfortable and tricky to adjust. Sound quality is passable for most non-musical applications but is marred by significant interference from the video signal. Considering the price of the glasses, you could reasonably expect far superior headphones than these.

Conclusion

We've had a lot of fun testing the i-glasses but I find it hard to recommend them at their current price of over £580, which does not seem to be justified by the brittle plastic construction and uncomfortable feel of the headset. Although the Escom adverts state that the i-glasses come with 'the 10 best 3D

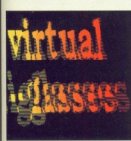


▲ The i-glasses are modelled here by our very own Art Ed, Helen Danks.

games' this only applies to the PC version. Currently there are no games available that use the glasses in 3D mode but a 3D version of *Gloom* is planned, along with another *Doom*-like called *Nemac* 4. You get a free video in the box which has a few minutes of 3D footage but that's about it. If these were selling for half the current asking price they would be a more attractive option. However, it looks like for many it's going to take the release of a killer 3D game or application to justify buying a set. ■

Tony Hogan

Just how do they work?



far away the objects appear. In the very simple example here, when viewed through the i-glasses the top of the text appears to be in the middle distance, tilted towards the viewer at the bottom.

The i-glasses generate two independent video images from a single composite video source to simulate the two independent views of the human eyes. It does this by separating the source image into odd and even lines, sending alternate lines to the left and right screens in turn. The 3D effect is achieved by splitting objects into two 'interlaced' parts, then offsetting these two parts horizontally. The amount of offset determines how close or

VIRTUAL I-GLASSES

A500	system requirements: Any Amiga with composite video output
A600+	
A600	ease of use: 80% Fitting can be awkward but connection is simple.
A1200	performance: 78% Reasonable picture and sound quality but far from high fidelity.
A1500	value for money: 55% Extremely expensive considering the build quality and lack of motion detection.
A2000	
A3000	OVERALL: Fun but far too expensive. 68%
A4000	

GP Fax 2.3

■ Price: £44.99 ■ Developer: GP Software ■ Supplier: Wizard Developments ☎ 01322 272908

Now you can say 'so fax me' with the best of them thanks to GP Fax.

Why send faxes from your computer at all? The obvious reason is that it's cheaper than buying a standalone fax machine. Fax machines are basically just a printer, scanner and a fax modem in a box. You don't need the printer and scanner if you have a computer.

The next reason is that you use your computer to send faxes, you are sending digital data directly and skipping the scanning process altogether. This leads to far better quality faxes on the receiving machines. So being able to send faxes from your Amiga is a very handy thing. So handy, in fact, that we now send most of our CU Amiga Magazine faxes from an Amiga rather than via a standard dedicated fax machine.

However, there's more involved to getting your Amiga churning out faxes than just buying a so-called fax modem. You need dedicated software to do the job and so far there's only two commercial solutions: The Austrian *TrapFax* and the Australian *GP Fax*.

All singing, all dancing ...

There's many different kinds of fax modems out there. Previously a specific version of *GP Fax* was required by different types of modem. Thankfully now, the package sensibly comes with both Class 1 and Class 2 versions included so it should work on any modems. *GP Fax 2.3's* installer detects if you have a Class 1 or 2 modem and installs the appropriate version.

Once installed *GP Fax* will either run on its own screen or open on the Workbench. It won't resize so if you are running a reasonably high resolution, open-

ing on the Workbench is best. The GUI is an odd custom job but looks reasonable and has clearly marked buttons for the various functions leading to quick and easy access.

When you start the program, it'll ask you to fill in details of the company name and phone number etc. These will appear at the top of every fax sent. All of the settings can be altered later if needed.

Let's get up and running

There are two ways to run *GP Fax*. One is to enter the fax in a simple text editor and let *GP Fax* convert this into a fax using the font provided which is readable and functional. This method works but makes for drab faxes indeed.

There is another more complex way, though, which results in amazingly swish looking faxes. This method involves intercepting output destined for the printer and converting it into a fax document. When printing, *GP Fax* pops up a requester saying 'Fax Printing'. The document can then be transmitted to a fax machine as if the remote fax was your own printer. In no time, I got *Final Writer IV* to print out some excellent faxes with proper scalable fonts, a dithered graphic banner and not a scanner glitch in sight.

Not without problems

This process wasn't without its problems though. I found it impossible to send reliable faxes with a Class 1 modem (A Hayes Optima 288 in my case). It would send to our office fax machine but it wouldn't send to any of the other fax numbers I tried. Playing about with the various settings didn't seem to work either.



▲ Sending faxes is a very simple matter with GP Fax.

However, when I used a Class 2 XLink 288 modem from Wizard Developments everything worked perfectly first time: it sent faxes to our office fax and to the other numbers I tried.

I recommend that if purchasing a fax modem you make sure to pick up a Class 2 unit. It seems easier to get it working with *GP Fax*.

Other minor niggles with the package include the fact that vital serial settings for the modem have to be set up in the icon ToolTypes rather than the GUI preferences.

Also, it would have been nice to have some method to print to *GP Fax* without it trying to lock the parallel device. This meant that I couldn't run *ParNet* at the same time as printing a Fax from *Final Writer* to *GP Fax* (the parallel port isn't used) which is rather annoying.

No messy nonsense here

However, by and large *GP Fax* works faultlessly. The built in phone book and outgoing call scheduler/timer is a real plus. Although there is some expected technical jargon, the manual is

generally clear and concise too. The fully featured *Aresx* port allows you to control *GP Fax* quite nicely to automate operations and interface it with your other applications. A built in fax viewer including saving as an IFF picture and a fax report logging facility are all included to cap off this powerful and no nonsense package.

In conclusion, *GP Fax* is a top quality product and if you need to fax, you can't beat it for producing the results. Very highly recommended. ■

Mat Bettinson.

GP FAX V2.3

3500	system requirements:
3500+	Any Amiga with 1Mb of RAM and a fax modem.
4000	ease of use: 89%
4000+	Dead simple to operate. The preferences could be better though.
41200	performance: 86%
41200+	Scheduling, Aresx and class 1 support sets the standards here.
41500	value for money: 82%
41500+	10 options are available but this is the professional business.
42000	OVERALL
43000	Good quality solid tool that performs the task admirably.
43000+	86%



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OctaMED 6 CD

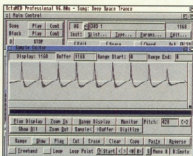
■ Price: £29.95 ■ Developer: RBF Software ■ Supplier: Weird Science ☎ 0116 234 0682



The Amiga's favourite music package makes it onto CD-ROM with a bevy of mods and samples.

OctaMED is without doubt the best all-round music package available for the Amiga. Now it's available on CD-ROM along with over 600Mbs of extra files. If you've missed out on the wonders of OctaMED, check out the Welcome to OctaMED panel for an overview of this amazing music package.

In the past, music software has been supplied on floppy disks and to keep costs to a minimum, you are normally supplied with the main program and just a few small demonstration files. Once you start releasing software on CD-ROM though there's ample space to



▲ Hundreds of modules and samples are included on the CD.

bundle just about as many support files as you can lay your hands on. Fortunately OctaMED's developers have an enormous database of song and sample files at their disposal. The OctaMED user group is made up of enthusiastic musicians who regularly supply the database

with new sounds and tunes, and all of this is included on the CD! This means you get over 350Mbs of modules, 1,200 MIDI files and 1,000 sound samples.

Walkabout

There are some definite highlights in the samples section. You may be familiar with the Walkabout Samples collection, which we reviewed back in July of 1992. We raved about them at the time, and they've stood the test of time. Converted from 16-bit originals, these take in a wide range of traditional and ethnic instruments and percussion, including both single hits and rhythm loops. There's also a good analogue percussion section for the dance crowd. Lots of samples from the user group's members and a section dedicated to samples from Urban Shakedown also feature on the CD.

As for the modules, these are sorted into named areas, as many of the group members have supplied a number of modules each. I even found a few of my old 'classic' modules on there! The variety and sheer number of modules is enough to keep anyone going for months on end.

SoundStudio

There will not be an OctaMED 7 – instead programmer Teli Kinnunen is transforming the program into something new called SoundStudio. Based around



▲ The CD also includes a sneak preview of the forthcoming 32-channel SoundStudio.



▲ You won't find a better value music package.

OctaMED 6, SoundStudio will offer 32 channel sample playback on the standard Amiga, along with a completely new notation editor. You can get an idea of what's to come from the demo version that's included on the CD, although it's still in its embryonic stages, so don't expect a radically different program.

Conclusion

This is one major music package and although it's certainly not to everyone's tastes, you'll find if you'll like it, you'll love it. If you are using both Amiga samples and on-board MIDI gear it just can't be beaten, especially if your passion is for dance music. Now that you get a complete sample library with the program, along with hundreds of modules to enjoy and learn from, it's even better value than ever before! If you have a CD-ROM drive and any interest at all in making your own music, this is an essential purchase. ■

Tony Horgan

Welcome to OctaMED

What makes OctaMED 6 so much better than anything else is the extreme flexibility and power it offers. While many musicians use it mainly as a four channels sample sequencer, it's quite capable of playing up to eight Amiga samples and seamlessly combines MIDI sequencing with four channel sample playback.

OctaMED is a complete music production package, and even has its own sampler and sample editor built in. This encourages spontaneous sampling and sequencing on the fly and means that you don't need to use a dedicated sampling program. However, if you do want to run another audio application in the background, there's even an option to free up the audio channels to allow this – a rare if not unique option. For those times when you need to write a tune that uses very little memory, OctaMED also supports the use of synthetic instruments. These are limited in their use but take up far less RAM than samples.

Recent additions to OctaMED include support HiSoft's 12 bit Aura sampler and Macro System's 16-bit hard disk sampler Tocatta. The revision on the CD even has improved Tocatta playback features that have been updated since the original floppy release of version 6.

Along with a massive following in the amateur sector, OctaMED has also proved its worth in the world of professional music production, and has been used to create quite a few successful records, most notably on the underground dance scene.

OCTAMED CD-ROM

System requirements:
Kickstart 2+, 1Mb RAM, CD-ROM drive

4000	ease of use	75%
4000	Value for beginners but very fast once you know how	
A1200	performance	93%
	Extensive level of control over every aspect of your music	
A1500	value for money	95%
	The program, modules and samples for under £30 – excellent!	

OVERALL
Essential
for all musi-
cians with CD-
ROM drives.

94

Sensational Software

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Kryonix Skeletal Objects for Imagine

■ Price: £24.99 for ten disks ■ Kryonix, 6 Kingsnorth Gardens, Folkestone, Kent CT20 2QW

Want to get the most from Imagine's bone's features? How about some pre-assembled dinosaur models?

Imagine 3.0 has many features which are incredibly powerful, but also frighteningly difficult to use. One of the most amazing features are 'bones', which can be used to great effect when animating.

If you create a model of your arm and wish to animate it realistically, you would need to move many elements individually. Think of how your arm moves as you reach to pick up a pencil: the upper arms moves but so does the lower arm, hand and fingers. Every part moves individually in relation to one another as well as en masse.

The Imagine 'bones' tool attempts to model how this process works. By creating bone objects and then applying a surface of skin on top, it's possible not only to build a hierarchical

structure into the movement, but also to take care of the way the skin would move. It might all sound a bit yucky but the end result is incredible: the arm would move realistically, with the facets which cover it moving and stretching. You can even add a texture on top and have it stretch in the same way.

Dem bones

Unfortunately, bones are very complicated and not many users can fathom exactly how they work. Luckily Kryonix is a company who have sussed bones out totally, and they have created three incredibly detailed dinosaur models which are constructed in the 'bone' friendly manner. The resulting models can all be animated very realistically: legs will move, jaws open, heads turn and all with a top



▲ The objects in this package are created in a way to move as realistically as possible.

layer of textured skin which stretches and compresses.

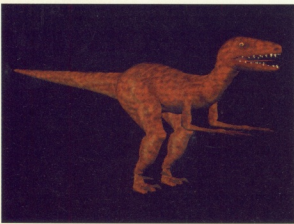
Using the STATE function, you can create the movements as a series of 'morph targets'. For example, one object state has the jaw closed and a second has it open. From the Action editor you can select the states to use and Imagine will interpolate the shapes in between models. Net result: a terrific animation of a dinosaur roaring.

The ten disk set also includes a complete environment for you to place your dinosaurs in: several landscapes, some prehistoric looking plantlife, sky backgrounds – all ready to load in and render. A simple 120 frame animated sky is provided which can produce some excellent results. The dinosaur models are very detailed, so you will need a good rendering set up: a few extra megs of memory, a co-processor and a hard drive are strongly recommended. It might have been a good idea to include the objects in several resolutions so that users with more standard Amiga systems could try the models out.

Limited to three

The downside to the pack is that unless you really need to create an animation with three dinosaurs you are stuck. But you do get to take apart some very well designed objects and see how they tick which is useful and Kryonix also promise forthcoming packs in Imagine4 (and possibly LightWave format) featuring detailed aircraft models. ■

John Kennedy



▲ The Imagine 'bones' tool tries to give real life movement to make their stunning images even more real.

Kryonix Skeletal Objects

system requirements:
All Amigas with 3Mb. More RAM is recommended though.

ease of use	80%
How child's play to use but the detailed instructions included here will help you master them.	
performance	85%
Will keep you busy for days rendering your own scenes.	
value for money	80%
Ten floppy disks packed with objects, textures and brushstrokes. Excellent.	

OVERALL
Great if you need Dinosaur objects or help with Imagine.

87%

GET STARTED



Main Contents List:



Also!

- Full version of Octamed 5.04
- 'Test Drive', exclusive version of Wordworth 3
- Disk Magic and Photogenics demos, info and tutorials
- Essential PD to Get Started!
- Special upgrade prices to new Amiga products and software
- Full colour booklet guide

The Get Started CD should be available from most good CD mail order and high street Amiga retailers. All rights reserved. Contents may be subject to change.

The History of the Amiga

Who invented it? The old Commodore, its bosses, ideas, mistakes etc. The Ecom rivalry and much more.

Amiga Environment

What is the Amiga? Why is it so special? What is the 'scene'? Who are Amiga Technologies and what do they do?

The Amiga Hardware

Inside, outside, ports, chips all explained

Workbench and DOS

What is it? Using it. Data and file management, Workbench environment tips, the CLI, advanced WB and CLI tricks

Programming

AMOS, Blitz, assembly, C, Amiga E and ARDXX examined

Become an Artist Overnight

Raytracing, 3D, animation, bitmap drawing analysed

Become an Amiga Music Maestro

Octamed explained, MIDI discussed, musicians interviewed

Getting Your Words Into Print

Word processing, Desk Top Publishing, Printers, Clipart etc

Surfing the Super Information Highway

Intro to the Internet, Surfing the Internet, WWW design,

Amiga Internet Providers, Amiga Internet software

General Arena

Emulation, Operating Systems, Virus Problems, Amiga in Business, Multimedia etc etc etc

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Where is the Amiga going? Amiga Technologies' plans, Amiga visions, possible industry comments

And Finally

Credits, thanks and anything we have forgotten

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- DTP Printers, Clipart

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- Architecture

- WWW Design

- CD Creation

- Bitmap Graphics

- Animation

- Amiga DTV

- Various

- All the other work

- MIDICraft

- F1 Licensureware

- AMOS Programmer

- Octamed Expert

- Audio Imaging

- LH Publishing

- The Room Upstairs

- Delphus Visuals

- Global Internet Ltd

- CD Creation

- Freelance Artist

- Delamation

- Freelance Writer

- Freelance Writer

- Paragon (Freelance)



Above are four screen grabs from the Amiga interface. The main part of the interface is a colour window, the main part of the interface is a colour window, the main part of the interface is a colour window, the main part of the interface is a colour window.

RELEASE 2



NEW SEARCH ROUTINE

The multi-tasking searchfield will seek program names or code numbers.



NEW 'HOT KEYS' FUNCTION

Just press 'F' for search, 'E' for extract, 'I' for find, 'C' to Copy or 'Help' for help!



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01325 352260

sales@active2.demon.co.uk



Do you want the latest PD CD-Rom that contains the latest PD to December 1995? Contains the greatest and latest PD from two superb PD libraries. The interface must be the most easy to use CD interface on any CD. Coded by the co-author of the superb new Get Started CD - just point, read about the disk and click to extract. Superb and very easy to use. The contents have also been updated so you get all the latest PD until early December 1995 and loads more as listed opposite. Comes with an on-line help routine, multitasking search routine and hotkeys function. If you want the latest or greatest PD software then look here! Over 640MB - 1.3 GiG's of material uncensored, 1000's of programs. Voted 92% 'best buy' in Amiga Shopper.

The images below show the ZOOM release 2 interface in various guises: the main interface, extract window, help guide, UN-DMS window, search/find tool and the new directory structure.



FourSquare HD Disk Drive

■ Price: £89.95 ■ Developer/Supplier: Brian Fowler Computing ☎ 01392 499755

We give a snazzy new black High Density floppy drive a spin.

Floppies (DD and HD) deserve to become obsolete. They're slow and expensive per megabyte compared to new storage methods but they have one thing on their side: they're cheap. So until Zip drive type devices become cheap enough to be supplied as standard with every machine, we'll have to live with the old floppy for a while yet.

Measly DD

High Density (HD) floppy drives are standard issue for every other computer platform on the globe, with a storage capacity of 1.76Mb per disk. However, apart from the original A4000 and later models of the A3000, all Amigas come fitted with what is now regarded as a measly 880K floppy drive, rather confusingly termed Double Density (DD). This is because HD drives spin at twice the speed, which is too fast for the Amiga's aging disk-handler Paula chip – hardly surprising since Paula is 10 years old.

Previous HD units, as found in the Commodore A4000s for example, were actually special expensive custom mechanisms that spun at half speed. Amiga Technologies couldn't source these drives again so even the amazingly expensive A4000T doesn't have an HD drive any more. Power Computing solved the problem by using a standard HD mechanism and integrating some special buffering electronics in their Power XL drives. However, this made them larger,

more expensive and a software patch is necessary to write enable the drives.

Sexy black

Brian Fowler has also come to the rescue with the FourSquare, a new HD drive that, like those in the Commodore A4000, consists of a half speed HD mechanism. This means no extra electronics and no software patch. However the best is yet to come: it's absolutely tiny, it's height is only about the equivalent of three floppies! As if that wasn't enough, it sports a sexy rough black finish that's just gorgeous to behold. If we awarded a score for looks, this drive would be a '100%er'. If you thought the Zip drive looked smart, check this out.

It's simple enough to use though to eject a disk you need to exert a fair bit of force to the slider on the top but the drive rests on rubber feet with a good grip.

Problems

I'd imagine that most potential purchasers of the FourSquare HD drive would be interested in it so that they can read and write PC and Macintosh HD disks, although hard drive back-up is another possible use.

Unfortunately HD disks formatted via *CrossMAC* or *ShapeShifter* seem to be incompatible with real Macintosh drives. That's a very serious blow indeed if Macintosh emulating is your thing. When asked about this Brian Fowler said that it would work with the Emplant Mac emulation card.

There are a couple more minor negative points though: one is



▲ This is one sexy looking drive: it's compact with a nice black finish.

that the drive has no pass-through port so it'll have to be the last drive in your chain if you already have an external unit. The reason is that it's supplied with a special cable that goes from the Amiga into a socket on the rear of the drive. The plug is actually a piece of circuit board which is necessary because a standard drive plug just would not fit. It has 'Top' etched in the plastic hood of one side of the plug to make sure it goes in the right way but it is likely to cause long term problems with repeated connection and disconnection, not least if you accidentally plug it in upside down. It's probably not a good idea to use this plug to disable the drive. Another drawback is the lack of a disable switch either. Then again, why disable it?

I found the FourSquare to be a good drive but 90% of my own use of HD drives is swapping disks with the Macintosh so it's usefulness was seriously marred in this respect. However, it works faultlessly with Amiga and PC

formatted disks, looks sexy as hell and takes up no space to talk of. If you need an HD floppy drive and don't need a pass through port, disable switch or Macintosh compatibility, I'd recommend the FourSquare. Otherwise go for a Power XL. ■

Mat Bettinson.

FOURSQUARE HD DRIVE

A580	system requirements:
A580+	Any Amiga with kickstart 2.04 and above.
A580	ease of use 92%
A580	PH. Plug it in and go. Couldn't be simpler now could it?
A1290	performance 82%
A1290	A good HD drive but lack of Macintosh compatibility is a serious flaw.
A1500	value for money 88%
A1500	Expensive for what it is but it's the cheapest going.
A2000	OVERALL
A3000	Worthwhile
A4000	drive if you don't need the bells and whistles.
	85 %



CD-ROM Round up

**UFOs devotees
will love this
selection of
CD-ROMs and
Aminet fans
will too.**



Artworx CD

There's no shortage of graphics and clip art CD-ROMs, so it takes something a bit special to make the grade. This one has been compiled from the public domain, drawing on images taken from demos, slideshows and various other sources. Most of the pictures are 'hand drawn' or ray traced, rather than digitised. The best pictures are those taken from Euro demos, some of which are stunning. There's also a good deal of 3D ray-traced images. However, much of the content is rather shoddy, drawn in low resolution with very basic techniques. Although there are quite a few different areas on the disc (scenery, people, transport etc) some of the categories include a disappointingly low number of pictures. This is not the kind of CD that is likely to have you coming back to it time after time as a source for clip art and pictures, mainly due to the inconsistent quality of the images. However, Amiga artists looking for inspiration will find plenty on offer, and when you see that it's on sale for under a tenner, it starts to look a whole lot better.

**Available from: Weird Science, 1 Rowlandson Close,
Leicester, Leics LE4 2SE. Tel: 0116 234 0682.
Price: £9.99 plus £1 P+P.**

69 97

The UFO Phenomenon

Is there anybody out there? According to the testimonies and pictures on this CD there have been countless alien encounters and government cover-ups over the past 50 years or so. The UFO Phenomenon is a collection of text documents and fuzzy alien pictures that include all the best-loved and most famous little green men stories, including the Roswell Incident (pictures of a 'real alien' being dissected during a post mortem), alien abductions ('and then I woke up inside a wonderful silver spaceship...'), gut-churning cattle mutilations (supposedly carried out by aliens, accompanied by photographs), crop circles and many more.

There's no shortage of text to get your teeth into but considering the capacity of the CD, it would have been nice to see a larger selection of pictures (there are around 80 on the disc). The main bulk of the CD is the written accounts of sightings and experiences, some from members of the US armed forces, which seem to be at the centre of a large number of these stories. Plenty of fan for UFO fans and supporters of Big Brother Conspiracy theories.

**Available from: 7 Bit Software,
1st Floor Offices, 2/8 Market
Street, Wakefield, West Yorks
WF1 1DH. Tel: 01924 366 982.
Price:
£14.95
plus 5p
P+P.**



61 97

Aminet 9

**If you picked up our
November 1995 CD issue
you'll already have at least
one Aminet CD in your col-
lection and if you've got any
sense you'll already have
space reserved on the shelf
for Aminet 9.**

The format is just as before, with various drawers of archived files that can be accessed and unpacked from an AmigaGuide document. There's 500Mb of new software since the last edition of the Aminet series. Each edition has a theme, which means that along with all the latest software from around the globe, you also get an extra large serving of software from a particular genre; this time it's games and there are nearly 1,000 of them on the disc. Although most of the data is in compressed form, the AmigaGuide index is set up for automatic decompression. Where picture files and music modules are selected, the relevant viewer and player tools are called up automatically. An essential buy.

**Available from: 17 Bit Software, 1st
Floor Offices, 2/8 Market Street,
Wakefield, West Yorks WF1 1DH.
Tel: 01924 366 982. Price: £12.99 plus
75p P+P.**

90 97



PD Scene

It's a gametastic bonanza in this month's look at what's new in the public domain. David Cassidy tries to burn off those extra Christmas calories by getting busy with this fine selection of low cost goodies.

Motorway Madness game

Destruction is the name of the game, as you and three friends can shoot, ram, smash and annihilate each other in this four-player bash. It will run on any Amiga but really requires an '020 and 1.5 Mb of RAM to make it worthwhile. That said, it's fantastic fun as you vent your frustrations by making each other's cars resemble very large bogies. There are power ups to improve your chances and three scenarios - forest, hills and plains to play over. The registered version offers computer controlled opponents but I think that option should be available here too, as if you haven't got three mates present then it's all over very quickly!

Available from: NBS, 1 Chain Lane, Newport, Isle Of Wight PO30 5QA.
Tel: 01983 529594.
Price: £1.00 plus 50p P+P.



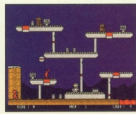
78 %

Plebs game

Everyone seems to be knocking out platform shoot 'em ups at the moment. This is one of the better examples and plays extremely smoothly. The gameplay is simple enough: hop around the levels, flick a few switches, zap the baddies along the way and then jump through the exit to the next level. So it's hardly groundbreaking stuff, but if you haven't yet had your fill of this stuff then you'll find a few hours of entertainment in it.

There's also the bonus addition of a simple shoot 'em up called Galaxy. Imagine a simplified version of Galaga and you've got the gist of it.

Available from: Snappy PD, 80 Ottawa Road, Tilbury, Essex RM18 7RH. Tel: 01375 850 365.
£2.95 including p+p.



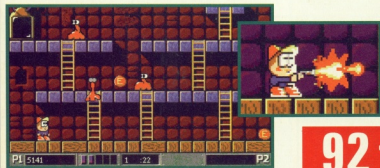
73 %

Trap 'Em game

The object here is to entrap the nasties and blow them to smithereens, collecting gems and bonuses along the way. It's a real hoot, as you've got to be careful to predict where your prey will walk, trap 'em, and then - to the sound of 'die sucker!' - you blast them to pieces. Ladders and levels complicate matters, and different dudes need different strategies. You can also buy power-ups to aid your quest and play at the arcade using some of the money you've earned. Every five levels you take part in a jetpack course, which adds a different twist, and with 3 towers, each containing 10 levels, there's plenty of longevity in this game!

The full version, available from Paul Clarke, the author, for a mere £3.50 - seems outstanding value to me, so you'd be well advised to grab a copy of this taster.

Available from: NBS, 1 Chain Lane, Newport, Isle Of Wight PO30 5QA.
Tel: 01983 529594. Price: £1.00 plus 50p P+P.



92 %

Penguins game

With only five levels, this demo is a preamble to the full version available from the author, Steve Hayne, for £7. The idea is to guide two penguins to safety by turning switches, smashing blocks, moving lifts, running on conveyors, setting bombs and avoiding nasties. There's a strong puzzle element, and there are lots of hidden surprises lurking around each corner. If there are enough levels in the full version it should turn out to be a worthy investment. As it is, the demo lacks a little, even though the graphics and sound are polished.

Available from: NBS, 1 Chain Lane, Newport, Isle Of Wight PO30 5QA.
Tel: 01983 529594. Price: £1.00 plus 50p P+P.



75 %

VChess 3.3 game

There's not a lot one can say about chess, but *VChess* is a good implementation of it on the Amiga. It can run from your Workbench, and its configuration can be set to your own specifications. Features include think lists, saved games, and replay games, so there's plenty to get your teeth into not to mention the actual games of chess themselves! Think times aren't too long on an '030 machine, although other configurations may differ substantially.

Available from:
Your Choice PD, 39
Lambton Road, Chorlton,
Manchester M21 0ZJ.
Tel: 0161 881 8994.
Disk No. GA601.

Price:
99p
plus
70p
P+P.

80 %

Wipeout! game

This parallax scrolling shoot 'em up has the player controlling a small ship which can turn in 360 degrees to seek and destroy the alien craft which roam the area. You can locate them using the radar, but even when they're right next to you the size of the playing screen is a little too small to provide any real chase-and-shoot action. The playing ship is also a little indistinct. An interesting foray anyway.

Available from: Your Choice PD, 39
Lambton Road, Chorlton, Manchester
M21 0ZJ. Tel: 0161 881 8994. Disk No.
GA600. Price: 99p plus 70p P+P.



62 %

International Golf Demo game

Golf games are inherently complex and this version is no different. Club type, ball pitch, power, direction and other variables effect the treatment of play. The control system is simple to grasp and you'll soon be swinging and putting with the best of them.

This demo features three holes from the Riviera County Club course and gives only five minutes playing time which is a little too limiting. It provides some idea of the full game, also available from Snappy PD for £4.50, which features four complete courses, tournament golf, 64 opponents and up to four players, but it could be better.

Available from: Snappy PD,
80 Ottawa Road, Tilbury,
Essex RM18 7RH. Tel: 01375
850365. Disk No. G26. Price:
65p plus 50p P+P.



78 %

Frenetic Games games

A collection of four games awaits you here. *Bomber Jack* is, unsurprisingly, a *Bomb Jack* clone in which you bounce and hover around the screen collecting the bombs and avoiding the nasties. *Boondar* sees you controlling a bouncing ball from overhead, making sure it bounces on the right blocks and collecting bonuses. Both are good games though on AGA machines the control is a little unsure. A puzzle platformer is next, in the shape of *Platman* as Pac adventures around a screen-by-screen maze, collecting gems and keys to other levels. Finally there's *Soko Ban* in which you push blocks into spaces. It sounds simple but becomes fiendishly addictive quite quickly.

All the games have good graphics and are presented nicely, but a lack of sound and some klunky controls make *Bomber Jack* and *Boondar* a little annoying after a while. Well worth a look for the other two, though.

Available from: NBS, 1 Chain Lane, Newport,
Isle Of Wight PO30 5QA. Tel: 01983 529594.
Price: £1.00 plus 50p P+P.



59 %

Polyworld & Flame games

Polyworld is a *Marble Madness* clone, whereby you control a gyroscope around an isometric landscape, travelling up slopes, across traverses and being careful not to fall off the edges. Once you've mapped all the areas then the game's finished but with stacks of levels that should take some time! The control system takes a while to get used to but it's an intriguing game to play and perseverance is the key.

If you're in a more frantic mood, then *Flame*, a *Dynablast* clone, is for you. You must destroy the blocks in your way, using bombs, to forge a path to your opponent and then blow them up before they get you! The graphics and sound are rudimentary but it hardly matters, as it's the pace of the action which is important. You can also turn off the game lights so you only see the areas around you when you set off some bombs. Two players can enjoy this, although there is a computer-controlled opponent option.

Available from: NBS, 1 Chain Lane,
Newport, Isle Of
Wight PO30 5QA.
Tel: 01983 529594.
Price: £1.00 plus
50p P+P.



82 %

The Dog's Cogs music disk



Interesting name for a music disk. If acid jazz is your forte then check out this Nerve Axis production for some exceedingly cool sounds. Over three disks you're treated to some absolutely fantastic modules, that make you just want to kick back, read something psychedelic and forget about work for the rest of the year.

If more music disks were like this, I'd do nothing other than mooch around grooving my head off.

Available from: NBS, 1
Chain Lane, Newport, Isle
Of Wight PO30 5QA. Tel:
01983 529 594. Price:
£1.00
plus
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86 %

V12-PD

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It had to happen.....The Traditional V12 Extra Length, Double Bill, Super Large, but surprisingly modest PD ad!

Hi there for another month, have you been keeping well? Good. Me? oh, I'm fine thanks. I'm just here to tell you about PD. Cheap PD. Not just Cheap, but horrendously, stupidly, mind numbingly cheapness, it's cheaper than Lord Cheap of Cheap Castle, Cheapington, Cheapshire, and then some. Did I mention it was cheap? Well, it is.

There's really not much you can say if you're still playing a quid - a disk, basically because there have been companies doing this for years now, and as time has gone by, floppy disks have become cheaper, as has the equipment to copy them, so why hasn't the price gone down? well, it has, but nobody goes as low as we do. They don't. And speaking of prices here they are:

1 - 5 DISKS 66P!
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So another month passes by when we're far and away the cheapest PD Library on the planet. What's new?

Just a few things actually. We now have 12,000 PD titles available, yes, 12,000! This includes bulk pack at such ridiculous prices you'll blow your mind, from 18p a disk - full disks from 17p how can you go wrong? You can't miss us!

It has come to our attention that many PD Libraries feel we are victimising them and trying to dirty their names. We aren't, we're friendly chaps here at V12, we'll swap with anyone, and will never say anything about anybody that's not true. Come on, swap some PD with us and you'll see what nice little fluffy bunnies we are.

We can scan art in animated or stills, any format your particular Amiga shows. Ham scans can be as good as AGA from us, and AGA can be the best quality you'll ever see. Many have seen our example scans, such as blowing up an object the size of a first class stamp with no loss of quality to Hi-Res laced, and putting an object of 3 square feet down to the same size, both pixel perfect! Digitising is also the same high standards, sampling goes up to CD quality and is totally clear and crisp. On what clever chaps we are.

We aren't business minded, we treat every customer as an individual, not just a name on a cheque. So many customers are enrolling as members and never leaving us it's amazing. Thousands of customers now are of the opinion that you don't need anyone other than V12 (I wonder where they got that idea from?) You can rest easy in the knowledge that each month V12 will acquire more new PD for you than anyone else. We've been trying our damndest to get what you want and that's why our title numbers are shooting up so fast every month. We serve the people with what they want, cheap, reliable software and no hassle. If you are one of the unlikely few that get a problem disk, we'll sort it out for you with no complaints, no moaning or hassles. If you have a problem describing or setting up a disk, just ring us and we'll ask, and if you still can't cope, we'll do it for you free.

We recently got online and now we can be found roaming around BBS's. We can be found mainly on Midnight Express BBS, which in our opinion is a superb BBS offering everything you'll ever need. If you want to get in touch with the old box with lights on the front, give us a tug and we'll sort it out. Please be gentle though, we're new to the modern game and know about as much as a person who doesn't actually know anything about modems. You see, we're human too. I think.

Midnight Express not only are selling modems for 50 quid with full software and connections and a month's free super to their operation, they're now offering ultrafast 33,600 BPS modems at silly prices of £189.99 that's some serious welly for a severely un-welly little price. Get in touch with them on normal telephone on the number 01384 77172, or if you have the idea of upgrading your modem and want to get in touch with their board, ring the number above, and, of course, the usual wiring method can be used (shock!). Their address is 21 Tiled House Lane, Brierley Hill, West Midlands, DY5 4LG. We're uploading a lot of new PD onto their boards, get in touch with them for some seriously new stuff. Midnight Express are not paying us anything at all for this mention, it's just that we've found them to be so helpful and offer such bargains to all us Amiga users. We feel it's time someone did the decent thing and mentioned them. If you're thinking of getting into Modern Land, these people are V12's recommendation for the easiest and friendliest route!

But what of us? We have the best catdisk available nowadays, without doubt. Just look at it's capabilities, optional RAM installation, automatic workbench detection and modification for perfect compatibility with any Amiga you happen to be running, ten device installation for upto 50% increase in speed without using or needing a hard drive installation option is being worked on as we read this! Oh that's just functional, I hear you cry, why should that impress me? What about animation, sound samples, music, graphics, custom menus, descriptions that are honest and adeptly funny (V12 accept no responsibility for spite jokes while using this catdisk, you've been warned!) Fully mouse controlled point and click usage, and now uses a modified easy to use type style. Our descriptions are now about 40,000 lines long, yes, us saddos have typed in 40,000 lines of text to amuse you, when do we sleep, eh?

Our catdisk's quality is now so relied upon to impress that we simply do not need to put lists of titles in our adverts, we feel assured that customers would rather get this and see our entire library, that a few mish manged lists. Want an example of our quality? We recently sent a batch of PD games to be reviewed in a leading Amiga magazine, all of them got reviewed in the same month, favourably, and we got Game of the Month to. Not bad for a first try, eh?

So all we ask is that you send us 3 1st class stamps or 75p for our 2 disk catalogue, this way you can see our quality without having to buy anything else at all, a sort of trial run. There's no risks, no fuss, and you'll love the outcome. Believe me, would I lie to you? Of course I wouldn't!

Let's face it, can you find any other advertisement in this or any other magazine that offers 12,000+ titles at 50p each, a one for one guarantee, a 2 disk catalogue for 75p, the complete range of services at our customary piddly prices, and more from anyone else? I don't think so, but I could be wrong. We're just Amiga users like you who happen to have collected all of our PD and are offering it at a price we think you should pay for it. Can you blame us for that? Yes? Oh fair enough.

So have we convinced you, are we worth 3 1st class stamps? 3 little bits of sticky paper for something that could, and should change your Amiga life for good, it's not too much to ask, is it? What do you want me to do, beg? plead? whine? scream? Eat a large automobile while balancing on one leg and stirring custard with my free foot's toes? I will!

So, I'll see you at the V12 party soon. Remember, we maynot be the most serious library in the world, but we're the best. Nuff said.

Special greetings this month go out to all the Amiga companies that stuck through the rot like we did, congrats on having faith in the world's best home computer. Also a big hello to all the companies returning to the Amiga once again. Personal greetings to our Dean Kelly of Midnight Express BBS, Hi Dean! Also Hi to Rob Davies, Stefan Manser, North Staffs PD, No Many Software, and Guterlinden Laboratories. We'd also like to confirm that Coca-Cola is simply the best. Neighbours is interesting and dribbling in public will get you into trouble. We know we've done tests!

V12 looks forward to the pleasure of your company! Hi Mum!

So that's it. OK? OK! Seeya,

Steve, V12

We stock all the collections including Assassin's 1-250, Fred Fish 1-1000, Scope 1-220, Amigan, Arug, New Zealand, Imagine Object collection, Clipart collection, Barbie, Amos, Legal Tools 1-149 and thousands more, we now also sell CD's cheaper than everyone else, every Amiga CD available is, erm, available from us!

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PD Utilities

Win the lottery, weigh up your odds on the horses, generate fractals and create adventure games with this month's serious PD selection, brought to you by Tony Horgan.

GRAC 2.0 adventure creator

Those with a good memory may recall a game from last month's PD Scene called *Return to Zantis* which earned a respectable 80%. This was created with the Graphic Adventure Creator (GRAC for short), an earlier version of which was previously reviewed in these pages, where it clocked up an astonishing 95% rating!

The idea behind *GRAC 2.0* is to give non-programmers the chance to make their own

graphic adventure games, by compiling backdrops, character animations, adventure game puzzles and soundtracks using the mouse-controlled front end. Evidently this is a very capable system, one look at the games it has created will prove that. However, it's far from the user-friendly system it could be. The program has been written in AMOS and like many other AMOS creations, gives little help when things go a bit wrong. For example, error messages are in short supply; if a process fails there's often no explanation as to why it didn't work or what you may be doing wrong. The absence of a standard Amiga environment doesn't help its usability either.

This is *liceware*, which is really just another way of saying

cheap commercial software. It comes with an essential 40 page manual although this could be improved by getting straight down to a walk-through tutorial. Perhaps the reviewer of the previous version was overcome by the quality of the demo adventure game, but I don't feel the cumbersome interface is deserving of a 95% mark. Even so, if you are willing to persevere to create your own *Monkey Island*-style adventure, *GRAC* is well worth checking out.

Available from: **F1
Liceware, 31 Wellington
Road, Exeter, Devon, EX2
9DU. Tel: 01392 493580.**

Price:
**£6.99
including
P+P**



82%

Beginners Guide to Workbench 3 Vol 4 tutorial

If you're a new Amiga user trying to get to grips with the machine and its operating system, you could do worse than take a look at this series from F1 Liceware. Volume 4 concentrates on AmigaDOS, creating bootable disks and the workings of archivers. There's a useful AmigaGuide document that explains how the Amiga's disk operating system works and the functions of the main system files. There's an automated archive extraction tool and a few other bits on there too. Although when you first get your Amiga all of this sounds incredibly tedious, the sooner you learn it the better. Once you understand Workbench and AmigaDOS, everything becomes far easier, whatever you use your Amiga for.

Available from: **F1 Liceware, 31 Wellington
Road, Exeter,
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01392
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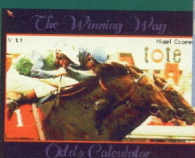
VOLUME 4

80%

Winning Way Odds Calculator betting tool

For those who like a flutter but find the maths a bit of a headache, the *Winning Way Odds Calculator* is here to help. It's a simple mouse-driven program that calculates the amount you would win from placing a specified amount on a horse (or horses) with specified odds. First of all you select the type of bet (single, double, Yankee, Canadian etc) then select the stake money. Next you select the odds and the computer then tells you how much you would win if the bet was to come in. There's no provision for each-way betting in this version (it's a possibility for future updates though). If a horse racing calculator is what you're after, then you've just found one!

Available from: **Nigel Cooper, The Chapel, Aylsham Road,
Felmingham, Norfolk, NR28 0LG. Price: £1.50 plus 50p P+P.
E-Mail: nigel@chakalak.demon.co.uk.**



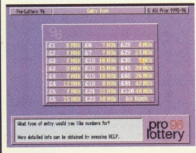
78%

Pro Lottery 96 lottery predictor

OK, here we go again with another lottery predictor review. I don't often do the lottery, and I'm not prepared to splash out a packet each time we get a new predictor in the PD mailbox, so is this any good or not? Well it's got a neat front end, and comes with a pre-programmed database of all the previous lottery results, plus it employs a range of prediction techniques including the old favourite 'wheeling' trick among many others. If you're like that woman out of Brookside, this comes highly recommended but don't give up your day job just yet. The unregistered version is available from the address below

for free, just send a blank disk and a SAE.

Available from:
Ali Prior,
10 Lovel Park
Heights,
Leeds LS7 1DP.



60%

Vark CLI Utils 10 utility collection

The Vark CLI Utils disks can be a bit hit and miss, depending on your particular definitions of hits and misses. Sometimes volumes may have a stack of tools that are completely irrelevant and seemingly useless to your set-up, but another may include a particularly obscure and invaluable utility that could make your life much easier.

Time for a list of what's on the disk then: 8n1.Device (a replacement for the serial.device and a special NComm version); Agraconv (IFF graphics conversion tool); Bootselector (choose alternative startup-sequences); BSPointer (lets the pointer roam into the border); BSBlank (blanks the border); CheckVal (checks disk for validation on restart); Fitter (hard to floppy disk copier); IM.000 (convert IFFs to icons - also 68030 version); LightUp (CD32 LED flash on disk activity); Magic64 (C64 emulator); MemDisplay (displays RAM size on startup); ModemCalc (calculates upload/download times); Modem Caller (calculates BT charges for modem users); PAM (combines Protracker modules and IFF pictures into executables); PatchTestWPA8 (graphics speed test); PatchWPA8 (patch write pixel array); ST (Atari ST emulator); SysBoot (Shapeways boot tool); TapGIF (GIF to IFF converter); TL.000 (List command replacement - also 68020 version); YCur2IFF (converts WinNT pointer to Amiga).

See anything you fancy? If so, get your copy from the address below.

Available from: Roberta Smith DTP, 190 Falloden Way, Hampstead Garden Suburb, London NW11 6JE. Tel: 0181 455 1626. Price: 90p plus 50p P+P.



81%

Snatch Pak 7 utility collection

Stop sniggering at the back! This is a collection of seemingly unconnected utilities. They're all on the disk in compressed LZX and LHA archives, along with a curious front-end display for decompression.

If you're familiar with working LZX ad LHA from the Shell it's best to bypass the menu on the disk and unpack them yourself.

Here's the selection: Jiffy Disk (for designing and printing address and disk labels); Dirll (an alternative to the AmigaDOS Dir and List commands); Abort Command (stops tasks launched from the CLI); Virus Checker 7.15 (finds and kills virii); Wangi Pad (launches programs from a list); CyberGrab (screen grabber for CyberGraphics); Hell's Multi Hacker (comms hacking tool); Editor Enhancer (tool for AMOS); TIFF datatype (for loading .TIF images).

Despite the front end this disk has a kind of throw-together-with-little-thought air about it. There are some useful tools here but certainly none I'd consider essential. Others may disagree.



Available from:
Roberta Smith
DTP, 190
Falloden Way,
Hampstead
Garden Suburb,
London NW11
6JE. Price: 90p
plus 50p P+P.

76%

Lyapunov 2 fractal generator

However jaded you may be towards fractal graphics, they have their uses and I still get some weird satisfaction from clicking on an interesting part and zooming into an infinite pattern of swirls and twiddly bits. If you share the same feelings, Lyapunov should be a welcome addition to your fractal graphics collection. Lyapunov stands out from the rest because its fractals generally come out as long sweeps of colour rather than the spiral patterns of Mandelbrot and Julia fractals, although the program is quite capable of creating these too.

The biggest render you can create is 640 x 320 pixels in 32 colours. This and a few other limitations hold it back from being much more than a toy. If you don't mind waiting longer than average for your results, check it out.

Available from: 17 Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield, West Yorks WF1 1DH. Tel: 01924 366982. Price: £1 plus 50p P+P.



80%

Art Gallery

It's amazing what an Amiga, an art package and some creativity can produce. Don't believe me? Here's the proof ...

A Foggy Day ...



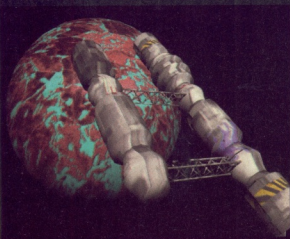
by Stephen Flowers and Jannie Ranson.

Warp Factor Nine



by Mark Adrian Kahn, West Sussex.

The Next Frontier



by Ian Fleet, Durham.

Christmas Cracker



by Jason Jordache, Lincs.

AMIGA

workshop

IMAGINE 3.0 92 ●

Belt up and fasten your seatbelts as we take you on a crash course of 3D rendering using our superb January cover disk *Imagine 3.0*.

AUDIOMASTER IV 97 ●

Tony Horgan goes all experimental in the final part of our AudioMaster IV cover disk tutorial series, with a few bonus tips for slick-sounding song creation.

OCTAMED 5.04 98 ●

Having only four tracks on the Amiga can be a bit restricting. Follow this tutorial, however, and you can double up to eight!

PAGESTREAM 2.2 107 ●

Getting to grips with a problem that has been troubling many PageStream users (judging by the amount of mail we've been receiving): how to import graphics.

AMIGA E 110 ●

Continuing from last month's lesson on how to create a text-finding tool, we now flesh the program out and make it a bit more functional.

DELUXE PAINT V 112 ●

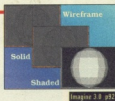
Making photographs curl up at the edges and lots of other fancy magazine effects can be easily recreated with *DPaint*. We show you how.

COMMS 126 ●

Good manners are essential to getting the best out of the net. Follow our netiquette guide and you can't go wrong.

SUBSCRIPTIONS 120 ●

CU Amiga Magazine – still the best value subscription in the world. Turn to page 120 now.



Making your life easier is the name of the game in our tutorial section. First you can learn the art of social graces on the 'net, then you can create programs in Amiga E and ARexx. You can also bone up on some fancy magazine effects in *DPaint*, catch the final part of our AudioMaster series and learn how to import graphics into PageStream. All this and Alan Dykes gets hot under the collar in Points of View.

FAQ 113

What's all this multimedia lark all about anyway? And what use is it on the Amiga? Only FAQ has the answer.

Q&A MASTERCLASS 114

It's always good to have a back-up. However, sometimes they can take up lots of valuable space. We show you how to sort the wheat from the chaff.

Q+A 116

The Robson and Jerome of the technical world, Tony and Mat, once again bring help to worried readers.

BACKCHAT 118

Filth, slander, abuse: it's all here in the section of the magazine dedicated to the readers. Oh and the odd opinion and piece of praise is thrown in too.

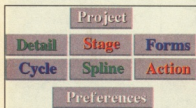
POINTS OF VIEW 122

Alan Dykes is angry, very angry. All you software publishers better sit up and take notice of what he has to say. So there!

Imagine 3.0

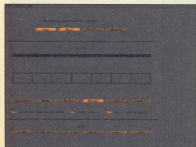
PART 1 Learning to use a package as powerful as last month's cover disk bonanza can take time, so here's the first part of your crash course in 3D model mastery with Imagine.

The trick of learning how to use *Imagine 3.0* is to understand the difference between the many different editing screens. Although each Editor is for a completely different task, many look almost identical and so it can lead to confusion. There are eight different Editors in total, but it is unlikely you will be required to use them all. In fact, a simple scene will only require you to use just one or two.

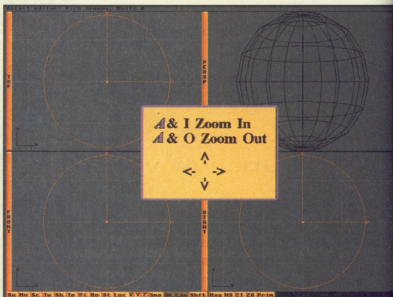


▲ Here are *Imagine*'s eight Editors. To create a simple scene you only need to get to grips with one or two.

The first Editor you will use is the one which starts almost every session of *Imagine*: the Project Editor. If you don't want to load an existing project from the title screen, you should select NEW and this will bring you to the Project Editor. It's here that a new project is created and named and any sub-projects (which will contain the images to be rendered) are defined. Creating the project itself is pretty simple: just give a good name which you will remember. When dealing with *Imagine* you will discover that it sorts file names depending



▲ You can load the Detail Editor from the Project Editor screen.



▲ In the Detail Editor you can zoom in and out of the display very easily by simply pressing Right Amiga 1 (for zoom in) and Right Amiga 0 (for zoom out). Check the screenshot above if you don't believe me.

on the case (upper or lower), so if you give one project a capital letter to start with, stick with it.

For the moment, let's skip directly to the Editor in which you will probably spend most time: the Detail Editor. You can reach it from the Project Editor screen either from the pull down menu or by pressing Right-Amiga and 2.

The Detail Editor is where simple objects can be created and existing ones manipulated. It's here where the object's 'attributes': textures, mappings, physical properties can be defined. You can alter its shape from here as well. It's also possible to preview each change you make by rendering the object quickly by itself.

It is vital that you remember that the Detail Editor is *not* where you position or animate objects. The Detail Editor is for dealing with the appearance of objects on an individual basis.

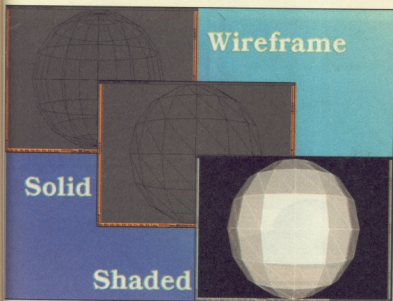
Ditch the cow

Rather than play with the Cow object again, let's create one for ourselves from scratch. Although *Imagine* likes to deal with objects as though they were constructed from triangular facets, you can also create objects by adding together primitive shapes.

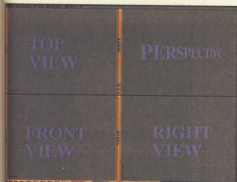
Use the third menu along (OBJECT) and find the ADD item. You will see another menu appear. Selecting SPHERE and *Imagine* will then create a ball-like object for you.

You should now experiment with the cursor keys to see how you can move the object around the screen. You are actually moving your viewpoint rather than the object, but the effect is much the same. Click with the left button in each of the grid windows in turn and then press the cursor keys.

Notice the interaction between the three views. You can also Zoom in and out of the display by pressing Right-Amiga 1 (for zoom



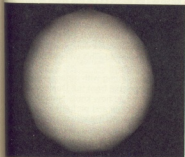
Here we have wireframe, solid and shaded displays of our sphere. Which one do you prefer?



The Detail Editor is where you can alter the appearance of objects. You can NOT position or rotate objects here.

and Right-Amiga O (for zoom out).

You will notice that the Sphere in the perspective view is a wireframe image: in fact, you can see right through it to the other side.



If you select the Quick Render view mode the view in the Perspective view is rendered in 3D for you.

If you want to see what a solid sphere looks like, use the second menu (DISPLAY) to select the item SOLID. The sphere will re-drawn. There is a third display type called SHADED. This will look the same as SOLID until you go to a dedicated Perspective display. To do this, click on the vertical frame of the Perspective window: where it says "PERSP". You can return to the main view by clicking on the left-hand side of the screen. This special one-view-only display works for the Top, Front and Right views too. Return to the normal, four-view display and look at the Perspective window. Under the "PERSP" text are some buttons marked 'A', 'Z' and 'P'. If you click on 'A' and then move

the mouse around whilst holding down the left mouse button you can spin the object around to look at it from any angle. Hold down the right button as well, and you can rock it from side to side.

The 'Z' button stands for Zoom and you can use it to make the object larger or smaller. The 'P' button allows the perspective to be changed, a bit like using a wide-angle or telephoto lens.

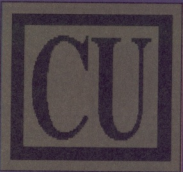
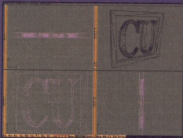
There is one more view mode which can be used: Quick Render. You'll find this in the first menu towards the bottom. When you select it, the view in the Perspective window is rendered in 3D for you. If you render our sphere you will notice it looks extremely dull and boring, this is because we have yet to add any textures or adjust any attributes: more on this later.

All change

Now that we can alter the viewpoint of our object, let's change the object itself. Before

Converting IFF Images is easy

Imagine can convert simple IFF images into models, which you can then manipulate like any other object. Using the CU Amiga Magazine logo, I used the menu item CONVERT IFF/ILBM from the OBJECT menu. This created an object which could be given some thickness with the MOLD/EXTRUDE tool.



Converting IFF images in this way is easy, but it has drawbacks. If you try to convert an image which is too complicated the procedure will fail: try to keep to two-colour outlines. Curves will not be converted well, and some objects can be too large and cumbersome to deal with easily. However, this is still an ideal way to quickly convert logos and other images - you can always edit the shape later.

you can manipulate an object in *Imagine*, you must first select it. This is because there may be more than one object on the screen at once. In this case we only have one sphere, so to select it press F1. It will change colour so you know it has been chosen. If there was more than one object on the screen, you would have to either pick the one you required from a list (Right-Amiga F) or cycle through them (Right-Amiga N) all in turn before pressing F1.

The right tools ...

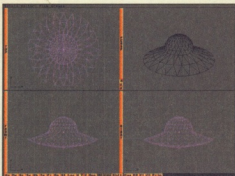
OK, so with the object highlighted you are now free to manipulate it. The most important tools are all at the bottom of the main screen and are as follows:

Or: Rotate. Click on this and you can spin the

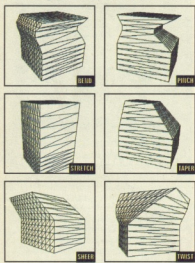
Flying saucer

There are actually two types of sphere primitive: the first is available directly from the **OBJECT/ADD** menu, the second from the **OBJECT/ADD/PRIMITIVE** menu. The first sort is dealt with more accurately by *Imagine*, although as we saw it refused to re-draw the wireframe image in anything other than its original shape.

Using the second type of sphere (which is a collection of facets, rather than a special primitive in its own right) we can manipulate the image. Here, I've used the taper and pinch tools: the result is an excellent flying saucer model. We'll see next month how to add colour and texture to the model to make it look considerably more realistic.



Manipulation tools



The six black and white images (far left: bend, pinch, stretch, taper, shear and twist) show what happens to a simple cube when it is subject to the various manipulations available with *Imagine 3.0*. The more facets which are used to build the cube, the smoother the bends in the object will appear. Incidentally, the cube was formed by using the extrude tool on a Primitive plane object. The abstract object (left) was



formed from simple primitives which had been altered with the manipulation tools. Notice the jagged edge as one shape intersects another: this is a consequence of the objects being constructed from facets.

object. Click on the X,Y or Z button to select the axis you wish to rotate the object around.
Mv: Move. Re-position the object. By default all three axis buttons are ON, click the OFF button and you can limit the movement so that only sideways or up and down motion is permitted. This makes it simple to line-up objects.
Sc: Scale. Adjust the size of an object. Again, the three axis buttons allow you to alter the shape in certain directions only: this makes it easy to stretch or shrink an object.
Tw: Twist. **Sh:** Shear. **TP:** Taper.
Pl: Pinch. **Bn:** Bend. **St:** Stretch

These tools alter the shape in particular ways: the best thing to do is to try them out

for yourself to get a feel for how they work.

Smo: Smooth. When turned on this will smooth off angular edges after deformations.

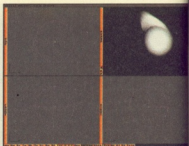
X,Y,Z: The Axis buttons used to limit motion or define the axis about which rotations and deformations occur.

OK: Confirm a manipulation to make sure it stays permanent.

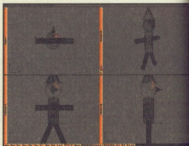
Can: Cancel a manipulation.

If you play with these tools and our sphere you could end up with something like the picture top right (the rendered image has been overlaid into the screen shot after the event, you won't see *Imagine* render like this normally.)

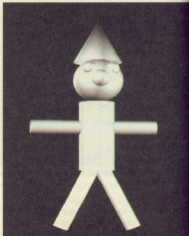
Notice that the Sphere we created is a



▲ You can try playing around with the various shape altering tools (Smo, X,Y,Z, OK and Can) you could end up with something like this.



▲ Now we'll try creating a little man with some objects from the Object/Add menu. Let's see what happens...



▲ Not bad for a first attempt. It's a bit basic perhaps but next month we'll be looking at how to make objects more realistic.

special primitive as far as *Imagine* is concerned and although it will be rendered properly, the wireframe outline will not appear to be altered. This will not happen with other shapes.

Try experimenting with other primitives too which are available from the Object/Add menu. You should now know enough to create a simple scene and perform a quick render. Next month we'll see how to alter the appearance of the objects to make them look a lot more realistic. ■

John Kennedy

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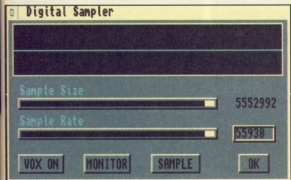
Sound Lab

Audiomaster IV

PART

3

Open your mind to the abstract wonders of experimental audio techniques in the final part of our AudioMaster IV series.



▲ Before you use the realtime effects, set the sample rate to maximum for the best sound quality.

Are you content with using standard sounds and working methods in your soundtracks? It's the easy option, but you'll never stand out from the crowd using preset sounds and text book techniques. To carve yourself a unique style, or preferably a range of unique styles, you have to be prepared to experiment and use your imagination. Let's face it, if the TB 303 was only used as directed in the manual (as a replacement for a human bass guitarist) we'd never have had the acid house phenomenon and today's thriving dance music scene that it spawned.

So, if you want to kickstart the next global music revolution, get your experimental head on and start digging into the hidden depths of your audio equipment.

Distant echoes

AudioMaster has an incredibly useful realtime effects section. At first these may just seem like a bit of fun but they can actually be very useful. The Realtime Echo/Delay feature from the Effects menu is of particular interest to seekers of aural weirdness. As

you probably know, echo effects are normally used to add ambience to vocals and melodies. The original signal would be passed through the effect via an 'effect send' output from a mixer, and then the echoes would be mixed back with the original signal via the 'effect return' input on the mixer. Many of the most basic audio mixers have at least one effects send and return. Check to see if yours does and give it a try. When using the echo effect it's normally best to turn on the Amiga's low-pass filter.

Filter through

Professional effects units usually work in 24 or 32 bits, while the Amiga is limited to 8 bits, and as a result the echo effects can get a little noisy. Turning the filter on will clean them up but also take off the top-end frequencies of the sound. You should also remember to set a high sample rate from the Sampler window, as this rate is used for the effects. Choose at least 25,000Hz or ideally as high a rate as possible. This will give you cleaner results with extra clarity in the top end of the spectrum.

Hang on though, that's hardly

'pushing the envelope' of modern music is it? One way to get some really spooky sounds out of your Amiga is to pump a continual stream of sound through the echo effect, with the decay control set to three or less. If you have any cheesy old synthesizers or other redundant instruments, try playing or sequencing a series of noises and effects through the echo. The extra long decay time of the echo will mean that all the separate sounds will repeat over each other, gradually fading into the distance, creating strange rhythms as they bounce off each other. While this in itself may not be particularly musical, when combined with beats and basslines provides a lush sonic backdrop, abstract enough to bring all kinds of images to the mind's eye.

Another good source for these effects is sample CDs. Get hold of a good sound effects CD and flick randomly through the tracks. Alternatively, connect a microphone to your sampler and make silly farting, screeching and wailing noises, then listen as they combine to make a mutating nightmare of sound.

You should also find a neat little program called *DVerb* on one of this month's cover disks (at the time of writing the cover disk contents are not confirmed so don't quote me on this). This will do much the same thing from your Workbench.

A bit distorted

Sampling clean realistic sounds is an essential step towards professional music success, but it's also good fun to see how much you can distort a sound from its



▲ Use high decay rates for abstract echo effects.

original form whilst keeping it useful in a musical context. The simplest way to distort a sound is to crank the volume up so that the waveform 'clips' on the top and bottom. This introduces hard sounding frequencies where the waveform takes a sudden change of direction, and works particularly well with analogue synth sounds. Those with access to the AmigaNet may like to download an *OctaMED* module of mine in the Mods/Techno section called *Sweatbox* which contains a few examples of analogue synths distorted in this way.

Once you have overdriven your sample, try distorting it further by running it through some filters. Boosting certain frequency bands can bring out hidden properties in the sound, and muting other frequencies can lead to similarly interesting results. ■

Tony Horgan

That's your lot

That's it. This is the final AudioMaster tutorial. If you have some music tips you'd like to pass on to other readers and get your name in print at the same time (big deal, I know, but it should impress your gran), then send them in to me at Sound Lab Tips, CU Amiga, 30-32 Farringdon Lane, London EC1R 3AU.

OctaMED 5.04

PART

4

Find out what stuff MIDI is made of and it can help you get around those four-track blues.

So, after several months of hard work, we're getting pretty proficient at this old music-making lark. We've been using samples as instruments and they're great, you can create any sound you like. However, the fact that the Amiga only has four tracks makes things a little limiting. It's fine if you're organised, you could stick to putting, say, a beat on track 0, a bass line on track 1, strings or choir on track 2, and a melody on track 3.

But there always comes a time when you think, 'Drat, there goes my last track'. Well, you've got two options. You can switch to 5, 6, 7 or 8 channel mode (see box-out bottom right on page 107), which uses a nifty workaround to squeeze more tracks out of even the most humble Amiga. The best solution, however, is to ditch the Amiga's

eleven-year-old sound capabilities altogether and go for a MIDI keyboard.

Radical? Not really. MIDI keyboards are getting cheaper all the time and the expense further reduces if you buy secondhand. You can use OctaMED with any device with MIDI IN and MIDI OUT sockets, but you'll also need a MIDI interface (about £25 from many CU Amiga Magazine ads) and two MIDI leads, each at least two metres long.

Right. Assuming you've bought the necessary goods, here's what to do ...

Making the right connections

The hardware bit first. Connect your MIDI interface to your Amiga's serial port. Then using the two MIDI leads, connect the interface's MIDI IN socket to your keyboard's MIDI OUT socket and the interface's MIDI OUT to the keyboard's MIDI IN. Make sure

4Ch MI

MIDICH	1	Suppress NoteOff
Preset	1	Extended Preset

Click Inst Params, and in this window find the MIDICH and Preset sliders. Each MIDI instrument (piano, guitar etc.) must have a MIDI channel and preset set. The preset is the number assigned to the instrument by the keyboard. For example, most keyboards assign number one to a piano sound. Check your keyboard's manual for this.

MIDI channels are a bit like Amiga sound channels, except there are 16 of them instead of four and one channel can play more than one note at once (as long as the notes are played by the same instrument). For songs using few instruments, it's easiest to give each instrument a different channel number. You can assign any instrument any number, but with most keyboards percussion sounds should have channel 10 and preset 0. (A preset of 0 uses the keyboard's default preset for the given channel).

How does MIDI work?

Rather than carry sound MIDI leads transmit information which can be used to play notes, turn on special effects and do everything that MIDI can.

For example, if OctaMED wished the keyboard to play a certain note, it would send a 'switch note on' message (together with the note's name and volume) through the interface's MIDI OUT socket to the keyboard's MIDI IN. To stop that note playing, OctaMED would send a 'switch note off' message at the appropriate point.

OctaMED can also send messages for 'pitch bend' (pitch sliding obtained by moving the keyboard's pitchbender sideways), 'modulation' (usually vibrato obtained by moving the pitchbender upwards), 'aftertouch' (again usually vibrato obtained by pressing a key down more firmly than when it was initially struck), and many more.

Most modern keyboards are 'polyphonic' and 'multi-timbral', meaning they can play more than one note and instrument at once. If your keyboard allows you to change the MIDI 'mode' (whether or not the keyboard should be polyphonic and/or multi-timbral), set it to mode 3.

MIDI

MIDI Active	AH
Input Active	AU
Input Channel...	A\
Ext Sync	A1
Send Sync	A2
Send Active Sensing	A3
Send Out Input	A4
Read Key-Up's	A5
Read Volume	A6
Reset Pitch/Presets	
Send MIDI Reset	
Send Local Control	>>
Note Killing	>>

they're the right way round or there'll be problems! Back to OctaMED. To enable the MIDI capabilities, select MIDI menu -> MIDI Active. An 'M' appears next to the Inst Params button (second row down) to confirm this. Now you need to tell OctaMED which of your keyboard instruments you'd like to use.

Now we're ready to rock 'n' roll

So let's do it! Make sure your keyboard is transmitting and receiving on all channels (your manual will show you how). Now let's set a piano sound. Move the MIDICH slider to (say) 1, and the Preset slider to 1 (assuming your keyboard's instrument number 1 is a piano). You also need to slide Vol up to 64 and to type 'Piano' into the Name box (well, you don't really have to name instruments,

Name	Piano	01
Vol		64

but it's best if you do). Please don't forget to slide the volume to 64, I've lost count of the number of 'Help me Ed, my speakers aren't working' phone calls I've had ... Press the F1 key to select keyboard octaves 3 and 4, then

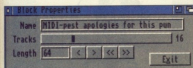
06		NRM
		34
C	D	< > Set Ctr

try playing notes using the Amiga's keyboard. Your MIDI keyboard should be making lovely piano noises. If not, check that everything's correctly connected (see first paragraph) and make sure your keyboard's set up to receive on all channels (your manual will give you clues).

Now select instrument 02 (Shift-<right>), and set this to Drums (channel 10, preset 0 unless your manual says otherwise). Remember the Vol slider and Name box too. When you've done, close the window for now.

Even more tracks

Next we'll increase the number of tracks in the block. Select Block menu -> Set Properties and drag the Tracks slider to 16.



Wow! Trouble is, it's now near enough impossible to read the notes, so select Settings menu -> Display Max Tracks -> 8. The block still has 16 tracks, but only 8 are now displayed at once. OK, the moment of truth - let's try recording. First choose MIDI menu -> Input Active and switch Edit mode on. Now select the piano instrument (01), then start the block playing using Play Block. Play anything on the MIDI

What are MIDI's main features then?

Many features are contained in the MIDI menu. By selecting Input Channel, you can tell OctaMED to only enter notes played on a particular MIDI channel; this is especially useful for certain budget Yamaha keyboards with annoying habits such as the PSS-780. Tick Read Key-Up's to control the exact length of played notes and select Read Volume if your MIDI keyboard is touch-sensitive.

You can use MIDI instruments on all 64 possible tracks, and you may also mix Amiga samples and MIDI instruments on the first four tracks. You can add MIDI instruments to the sample list using the Sample List Editor's Add button, saving you from fiddling with the MIDICH and Preset sliders every time you want to use MIDI. It's best to create an imaginary directory for them since they aren't actually loaded from disk.

Some player commands work differently when used with MIDI. For example, types 01 to 03 control the pitchbender, 04 the modulation wheel, and 0E the stereo location (panning). To change a MIDI controller, use types 05 and 00: set the controller number with 05, then set its new value with 00.

You might want to use OctaMED's alternative method of setting the tempo: Beats Per Minute. Click on SPD (beside the tempo sliders) to select this mode. The longer slider controls the number of beats per minute (just like a metronome). For example, a value of 60 is one beat per second. The other slider controls the number of lines per beat. For example, '8' means that eight lines are considered as one beat.

keyboard, and click STOP when you've finished. Click Play Block again to play back what you've just recorded.

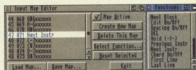
Let's get the messy bits sorted first

Does it sound a bit of a mess? If you played any chords while recording, the notes of the chords will be played one after the other rather than together so it will sound a bit jumbled together. Switch Chord on (just below STOP) to rectify this. Also, it's very difficult to keep in time because there's no percussion track. So let's make one. Move to track 7, select instrument 02, and build a drum beat using your MIDI keyboard. Just a bass drum every fourth line will do for now.

Now try recording again (use Track menu -> Cut to clear any tracks that need clearing). Should be much easier now. If you'd like a four-beat introduction before you start

recording, press the F9 key then click Cont Block (or press Alt-Space).

One of the problems with using MIDI is that you're constantly moving from your Amiga to your MIDI keyboard and back again. Wouldn't it be nice if you could control OctaMED features (e.g. Play Block, select next instrument) simply by pressing keys on your MIDI keyboard?



Well ... you can! (You'd never have guessed) Firstly, enter your keyboard's top two notes into the block, and make a note of their names (they might be e.g. B-6 and C-7). Next, select Display menu -> Input Map Editor. In this window, click Create New Map and switch Map Active on. Now drag the small scroll bar downwards until the list displays your two top notes.

Click on the second-top note, then click Select Function. This small window shows a list of all the functions you can assign to each note. Drag the scroll bar until you see Next Instr, and click on it. Now try pressing the note which is second from the top: you should see the current instrument number increase. Neat or what? Assign your top note to Play Block in the same way, then close the Input Map Editor.

Now get on with it yourself

That should be enough to get you cracking with MIDI. Admittedly, E's MIDI support isn't the best (as it's primarily a sample sequencer), but you can certainly obtain great results with patience.

Next month in my final tutorial, we'll attempt to demystify that love-to-hate beast, the synthetic sound editor. ■
Ed Wiles

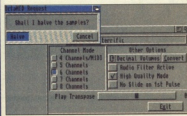
Beef up your track numbers - the easy way

There is an easy way to get around the limitations of your Amiga just having four tracks. The 5, 6, 7 and 8 channel modes allow your Amiga to play up to eight samples at once. To use these modes, firstly increase the number of tracks to 5, 6, 7 or 8 (using the Block Properties window as with MIDI). Next, select Song menu -> Set Options. On the left of this window, click on the appropriate

channel mode button. Click Halve in the requester, then close the window.

Unfortunately, it's not as simple as it sounds and you'll notice some side effects pretty quickly. The volume of all samples halves to minimise distortion. There's a different method of setting the tempo: you can only use values 1 - 10 with the longer slider. And the quality decreases: try selecting High Quality Mode in the Song Options window (if you have an A500 or A600, this will only work in 5 or 6 channel mode).

For best results, however, you shouldn't use more channels than you need. If, for example, your song doesn't use more than six tracks at once, you should select 6 channel mode instead of 7 or 8 channel mode. This gives you two high quality tracks to play with, too (tracks 3 and 4).



Pagestream 2

PART 4

In our final look at PageStream we cover how to import graphics into this excellent DTP package.

Importing graphics into PageStream seems to be the subject of many queries we've received over the last few weeks, all of which we hope to clear up in this month's final PageStream tutorial.

PageStream works with two different types of images: bitmapped and structured. Within these categories the program supports a number of graphics formats including IFF-ILBM and TIFF for bitmaps and DR2D and Illustrator for structured drawings. You'll find more import filters (file loaders) on the cover disks and CD-ROM from the November issue of CU Amiga Magazine, expanding the program's support to PCX and GIF among others. These filters need to be put into PageStream's Drivers drawer. Once you've got them in place you're ready to load just about any image you like. However, there are a few potential pitfalls along the way, so we'll go through the procedure step by step.

Importing graphics

To import an image, no matter what the format, choose Import/Graphics from the File menu. A requester will appear for you to choose your image. Select the image and then click OK. The next panel you will see, is the 'Choose Type' requester.

Although PageStream 2 automatically selects the correct filter

for the image you are using, you still need to choose a number of other attributes for the image. These attributes differ depending on the format of the image. We'll take a look at those for IFF-ILBM.

In the 'Choose Type' panel you'll find two listviews. There are two options in the left list: one is IFF-ILBM PAL and the other IFF-ILBM NTSC. Readers in the UK should choose the PAL option by clicking on the IFF-ILBM PAL filter. Those of you in other countries would choose either IFF-ILBM PAL or IFF-ILBM NTSC depending on the television display format used in that country. Australia would be PAL while the US and Canada would be NTSC.

The other list asks whether the image is to be imported as an Object or as a Picture Window. The easiest one to choose is Object. If you select Picture Window, a separate window is created with your picture inside it, which some people might find unnecessary. You can then select the area of the image you want to import, copy it to the clipboard and then Paste it into your document.

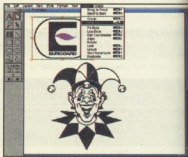
Pasting down

If you load the picture as an object, you'll see the pointer change into a black square. The same will happen when you come to paste your selected area if you choose to load as a picture window. Now you can do one of two things. If you just click anywhere on the page, the picture will be pasted down at its original size. However, you'll normally want to scale your picture to fit the layout. In this case, hold the left mouse button and drag out the area you want the picture to occupy.

When you release the button your picture will be pasted and scaled to fit exactly in the box.

If you import something other than an IFF-ILBM, the Choose Type requester will display new options. For example, with ProDraw clips you'll see two options in the As list. One is All Clips and the other the name of your clip (ProDraw allows you to save more than one clip as a single file). If you have saved more than one clip in the file, there will be a list of all of them.

To place the image onto the page, click OK on the 'Choose Type' panel and then click the left mouse button once on the page. The first thing you'll notice is that unlike bitmaps, the colours in the drawing will be displayed on-screen, providing you have PageStream set up to run in colour. More interesting is the fact that a structured drawing in



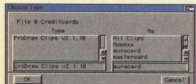
▲ Structured drawings in PageStream can be 'ungrouped' and the different pieces altered when necessary. See picture bottom right.

PageStream can be broken up into its different components.

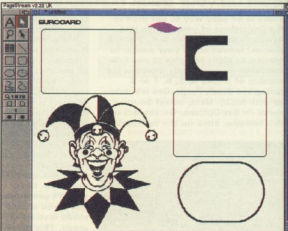
Taking the example of a clip of a Eurocard symbol, all the pieces that go to make it up can be 'ungrouped' and removed from the image and/or changed in some way. For example the text can be stretched or the colours changed. This is only possible with structured drawings.

Text runaround

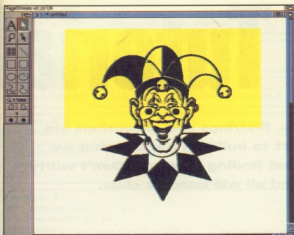
Once you have a bitmap picture on the page it can be made bigger or smaller by dragging the handles that surround the image. You might also like to mix a picture with some text and have



▲ When you import a ProClip which may contain one or more drawings, make sure you choose the drawing you want to place on your page.



▲ ... here we have the picture which has just been ungrouped. You can now click on the different components and alter them if you so desire.



▲ The background colour is a bitmap and can be made transparent so you can get effects like this when a coloured panel shows through.



▲ When you import a bitmap and choose Picture Window, you get the opportunity to crop the picture and then copy and paste it into PageStream.

that text flow around the image. This is no problem for *PageStream*, just make sure your picture is selected and then choose Text Runaround from the Object menu then choose an icon that suits the way you want the text to flow around the image. This is useful for all objects, not just pictures.

How about putting a border around your pictures? Make sure the picture is selected and then choose 'Line Style' from the Object menu. Now choose the attributes for your line, like the

width and colour. Once you click OK, you will find your image has a border. Just as useful is a feature that lets you make the background colour transparent. First select the picture then choose Object/Fill Type. Click on the box that says None. After clicking OK, the background colour of the image will now be transparent allowing coloured panels and pictures behind this image to show through.

Speed tips

Depending on the speed of your Amiga, you may experience some delays when *PageStream* rescales pictures. In order to speed things up, pictures can be represented on screen as crossed out boxes by selecting Show Pictures from the View menu. Refresh your screen by clicking on a scroll bar. All of the bitmap pictures should now be crossed out. ■

Larry Hickmott

Let's kiss this thing goodbye

Congratulations! You've made it to the end of the final *PageStream* tutorial. If you're serious about getting the most from this excellent program you can order the *PageStream 2.2* manual and a few extra bits from Soft-Logik (tel: 001 314 256 9596) for £24.95 or better still, you can upgrade to *PageStream 3* for £134.95. See the advert on page 49 of the October 1995 issue of *CU Amiga* Magazine for full details. You can also find upgrade details in the November and December 1995 issues of *CU Amiga* Magazine. My own Amiga DTP magazine 'Em' will continue to publish tutorials on this great program as well as many other desktop publishing programs including *ProDraw*.

CU Amiga CD-ROM extras

A number of readers have asked how to use the *PageStream* extras disk from the CD-ROM cover-mounted on the November issue of *CU Amiga* Magazine. The installer is looking for a disk called *PageStream2Extras*. As this is the CD version, that disk does not exist, so you need to make an assign. This tells the installer program to look on the CD for the files it wants instead of looking for a disk called *PageStream2Extras*.

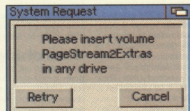
As soon as you get the requester which tells you to 'Insert Volume *PageStream2Extras* in any drive' you need to make the assign. Do not click Cancel on the requester. Simply move it out of the way while you make the assign. To make an assign follow these steps.

Open a Shell window and type following:

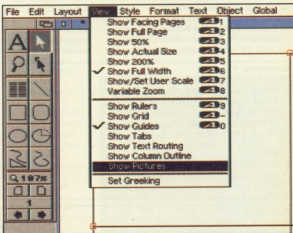
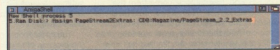
Assign *PageStream2Extras*:

CD0:Magazine/PageStream_2.2_Extras

Please note the spaces between the words Assign and *PageStream* and the colon (:) and CD0. Refer to the screen shot



at the bottom of this box out if you are unsure. Now go back to the requester and click on the Retry button and the installer will spring into life and copy all the necessary files into their rightful places.



▲ When you find *PageStream* slowing down because of the pictures you have on your page, try selecting 'Show Pictures' from the view menu to hide all images.

Amiga E Tutorial

PART 2

Things are getting tricky now. E-strings and exceptions are called into play when we start to build on the GUI that we created last month for our text finding program. Don't worry though, follow our tutorial and all will become clear.

Last month we built a simple GUI for our text finding program. This month we are going to flesh it out a bit and build the core part of the program that will work with the GUI. This will involve using a lot of different system functions, objects and features of *Amiga E* such as E-strings and exceptions. These topics are applicable to any version of the Amiga operating system.

The first thing to do is construct a function to scan all the files in a directory. The directory in question will be supplied by the user in the 'dirst' gadget. So, we need to first find out whether this string actually does refer to a directory. The DOS library function 'Examine' will tell us this by filling in a 'fileinfoblock' (or FIB), but to use 'Examine' we need a lock. The basic structure (omitting the error checks) is therefore as in **example 1**.

The definitions of 'ACCESS_READ', 'DOS_FIB' and 'fileinfoblock' come from the module 'dos/dos', so this module must be included in the 'MODULE' line of the program. As you can see, the 'direntrytype' element of the FIB tells you whether the file that has been examined is a directory or not. Positive and zero values mean the file is a directory and all other values mean that it is an ordinary file.

Now we know we're dealing with a directory we can start a scan of all the files in this directory using the DOS library function 'ExNext'. This uses the FIB we've just set-up using

'Examine' and the same lock, and it returns 'FALSE' when there are no more files left to examine or an error occurred. The outline of this code is in **example 2**.

However, this is not quite the whole story: the 'fib.filename' is obviously relative to the scanned directory, so in order for any 'scanfile' function to work properly the current directory must be the directory being scanned. To change directory you need a lock on the directory (which we have), and you are required to change directory back to the original directory when you've finished. An outline of the required change can be seen in **example 3**.

Searching for a file

Now we can get on to the meaty part of our program: searching a file for the 'findstr'. To read from a file you need to open it using the DOS library function 'Open'. Then we can read a line at a time using the E function 'ReadStr' with a sufficiently large E-string. Once we've finished with the file it must be closed using 'Close'.

See **example 4**.

The small function 'myreadstr' simplifies the process of checking whether anything has been read from the file (a partial line may still have been read even if 'ReadStr' returns -1). The constant 'BUFFERSIZE' must be large as this is the maximum number of characters that will be considered a single line. If a real line is bigger than this then it will be read as if it were several smaller lines, so nothing is actually lost.

Once a line has been read it is very simple to search it. All we need to use is the E function 'InStr'. If this returns -1 then the search failed so a suitable 'find' function is:

```
PROC find(s) IS InStr(s, findstr) <- -1
  Assuming the definition of a reporting function,
  the body of the above 'WHILE' loop would
  therefore be as in example 5
```

Reporting findings

When we find a match we want to add it to the scrolling list. To do this we need to finish the 'LISTV' gadget of the GUI. What we need is a standard. Exec list to hold the list of values. The Exec list object 'lh' is defined in the module 'exec/lists' and it is basically a doubly-linked list of nodes ('ln' objects, defined in 'exec/nodes').

```
DEF reslist:PTR TO lh
  This declares 'reslist' to be a pointer to an Exec
```

Example 3

```
PROC scandir(s)
  DEF lock, oldlock, ...
  lock:=Lock(s, ACCESS_READ)
  -> Change directory to the lock
  oldlock:=CurrentDir(lock)
  -> Examine and scan directory...
  ...
  CurrentDir(oldlock)
  -> Rest of clean up...
  ...
ENDPROC
```

Example 1

```
PROC scandir(s)
  DEF lock, fib:PTR TO fileinfoblock
  lock:=Lock(s, ACCESS_READ)
  fib:=AllocDosObject(DOS_FIB, NIL)
  Examine(lock, fib) IF
  fib.direntrytype>=0
  -> It's a directory.
  ELSE
  -> It's actually an ordinary file!
  ENDIF
ENDPROC
```

Example 2

```
WHILE ExNext(lock, fib)
  IF fib.direntrytype<0 THEN scanfile(fib.filename)
ENDWHILE
```

Example 4

```
PROC scanfile(file)
  DEF fh=NIL, buffer[BUFFERSIZE]:STRING
  fh:=Open(file, OLDFILE)
  WHILE myreadstr(fh, buffer)
  -> Try to find findstr in buffer...
  ...
  ENDWHILE
  Close(fh)
ENDPROC

PROC myreadstr(fh, s)
  IF ReadStr(fh, s) <- -1
  RETURN TRUE
  ELSE
  RETURN s[]
  ENDIF
ENDPROC
```


Example 5

```
IF find(buffer) THEN report(file, buffer)
```

Example 6

```
[LISTV,{l_ignore},' ',25,10,reslist,FALSE,0,0],
```

Example 7

```
resgad:=[LISTV,{l_ignore},' ',25,10,reslist,FALSE,0,0],
```

Example 8

```
PROC report(f, s)
  setlistvlabels(gh, resgad, -1)
  addNode(reslist, f, s)
  setlistvlabels(gh, resgad, reslist)
ENDPROC
```

Example 9

```
PROC addNode(list, f, s)
  DEF node:PTR TO ln
  NEW node
  node.name:=String(StrLen(f)+EstrLen(s)+4)
  StringF(node.name, '\s -> \s', f, s)
  AddTail(list, node)
ENDPROC
```

Example 10

```
PROC freeNodes(list:PTR TO lh)
  DEF worknode:PTR TO ln, nextnode
  worknode:=list.head -> First node.
  WHILE nextnode:=worknode.succ
    -> Free the E-string name.
    IF worknode.name THEN DisposeLink(worknode.name)
    -> Now we can free the node.
  END worknode
  worknode:=nextnode
ENDWHILE
-> Reset the list to be empty.
newList(list)
ENDPROC
```

Example 11

```
PROC h_go(info)
  go()
ENDPROC

PROC go()
  -> Empty the list and redisplay it.
  setlistvlabels(gh, resgad, -1)
  freeNodes(reslist)
  setlistvlabels(gh, resgad, reslist)
  scandir(dirst)
ENDPROC
```

Example 12

```
PROC main() HANDLE
  newList(NEW reslist)
  myeasygui(...)
EXCEPT DO
  IF reslist
    freeNodes(reslist)
  END reslist
ENDIF
ENDPROC
```

list, and we can initialise this pointer using the 'NEW' operator. However, before we can use the list we must initialise it using the AmigaLib function 'newList'. The following statement will do this all in one go:

```
newList(NEW reslist) This list can now
```

be used with the 'LISTV' gadget, so this line can be changed in the GUI. (The 'l_ignore' action function is the same as the 's_ignore' action function mentioned last month, and it serves the same purpose.) See example 6.

To change what this gadget displays we must use the EasyGUI function 'setlistvlabels', first with a -1 value to remove the current list cleanly and then with a new or updated Exec list. However, to use this function we must use a DIY version of the 'easygui' function, as described in the EasyGUI documentation. We'll call this

'myeasygui' and the only difference from 'easygui' is that we'll make it use a global 'gh'.

```
DEF gh:PTR TO guihandle
```

Now we must identify the list gadget, and we can do this with a simple assignment in the GUI description, so the above 'LISTV' line can be changed to use a global variable 'resgad'. See example 7.

The reporting function then simply removes the current Exec list cleanly, adds a new node to the list and then reattaches it. See example 8.

Adding a node to the list uses the system function 'AddTail' after constructing a new node. The 'name' element of the new node is a dynamically allocated E-string (i.e., the E function 'String' is used). This string will contain the

name of the file and the line of text where the match was found. To do this we can use the 'StringF' function with the format string 's -> \s', where 's ->' is just a nice way of separating the file name and text line. The following version of 'addNode' omits the error cases. See example 9. Notice that, because we know that the line of text is an E-string, we can use the faster 'EstrLen' function instead of 'StrLen' for calculating its length.

The last thing to do with the Exec list is empty it. This must be done before each new search (to show the new matches) and at the end of the program (to free the memory used by the list). The method used to 'walk' the Exec list (i.e., follow the links from the start to the end) is a common idiom, and is peculiar to the way Exec lists work. See example 10.

The GO! button

The action function for the 'GO!' button simply calls the 'go' function to do all the work. This function empties the result list and redisplay it, and then scans the selected directory. See example 11. Again, the error cases have been omitted. In general, it is a lot clearer to use exceptions to do your error processing and as an example here's the outline of the new 'main' procedure. See example 12.

The procedure is flagged as having an exception handler by the 'HANDLE' after the parameters, and the start of the handler is marked by 'EXCEPT'. When an exception is raised in the main body of the function, program control passes immediately to the exception handler (the 'DO' bit means that the handler is also called when the procedure terminates). The handler should then clean up by deallocating anything that it allocated.

In example 12, the Exec list is emptied (using 'freeNodes') and then freed (using 'END'). This only happens if 'reslist' is not zero (or 'NIL'), i.e., if the list had been successfully allocated. For this reason it is wise to initialise 'reslist' to 'NIL' in its declaration. See example 12. This is the general style of the functions and declarations in the complete example (which can be found on this month's coverdisk). A small exercise for the keen reader is to work out how to add some code to also report the line number of the text when a find occurs. The screenshot shows the finished program (with line numbers) in use. ■

Jason Hulane

Next month

There are quite a few inadequacies in the current program. Two obvious problems are: 1) there is no way to stop a search once it has started and 2) the searching is very slow. Next month we'll address these issues.

More complete descriptions of the Amiga system functions used in this tutorial can be found in the 'Rom Kernel Reference Manuals' (Addison-Wesley) and 'The AmigaDOS Manual' (Bantam Books), which are essential reading for all Amiga programmers.

Graphics Masterclass

Deluxe Paint V

Continuing on from last month's tutorial we'll be looking at more ways that you can reproduce some of those fancy effects that magazines use with *DPaint*.

PART 4

In the final part before an exciting new change of direction, **Graphics Masterclass** passes on a few more tips for *DPaint* fans.

All curled up

You may have seen an effect in magazines where a corner of a photograph curls up. Some high-end image manipulation software does this automatically, but we can simulate it cleverly on the Amiga using *DPaint*.

The first thing to do is create the curl. This is just a triangular shape with a circular bite at the base, filled with a graduated sequence of colours to suggest highlights. Draw a triangle that's as tall as your main image and about 2cms wide.

Call up the Ranges requester in *DPaint* and create a range of colours that veers from light to dark a number of times in the range. Now from the Fill requester, select the range and click on the contour fill gadget (the icon to the right of the horizontal and vertical fill icons). Either draw and fill the triangular shape or use the filled polygon tool to create it in one go. Using the filled circle tool with the



▲ The triangular brush has been pasted down, with a circular shape removed at the base. Transparency has been set at 70% and the portion of the image to the right of the curl has been erased to emphasise the effect.

background colour selected, cut out a circle from the base to simulate the curve.

To combine this curl with your

image, cut it out as a brush and save it to disk for now. Load your picture, select Transparency from the Effects menu and set it to 70%. Load your curly brush and paste it down onto the end of your picture. Finally erase that portion of the image to the right of your new brush to make it appear that the curl is part of the picture.

Golden moments

This next effect may not look like much on paper, but that's because it's a very subtle animation technique. To see how it works you really need to try it for yourself. Trust me, it's good!

The idea is that we add an animated shimmer effect to the golden block. The source image was created in a ray-tracing program – use *Imagine* from CU Amiga Magazine's January 96's cover disks. Tweak your colours and textures carefully to get a good gold-like surface. If you end up with something that's not quite the right colour, you can always retouch it with an image processor.

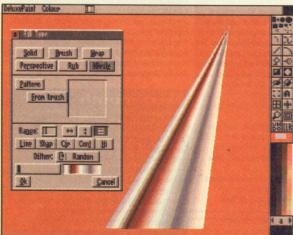
In order to create the desired effect, we first need to make a 20 frame animbrush of an un-filled circle gradually increasing in size. This will be used with the Smear mode to create the shimmers. The circle isn't going to form part of the picture. Instead it's going to be used as a tool to affect the main image, so it can be made quite roughly and quickly; here's how.

Create a 20-frame animation based on a black screen. On frame one draw, in the centre, an unfilled circle in a light colour, around 3cm wide using the medium-sized round brush. Cut out this circle as a brush and clear the screen.

Call up the animation Move requester (capital M on the key-board) and leave all the settings at zero except the Z plane. This controls the apparent magnification factor throughout the sequence; type in minus 300 (-300) in the Z distance box, and to make sure everything's OK, click on Preview to make sure your circle brush will enlarge over the duration of the animation.

When all's well, click on OK, and watch as *DPaint* draws ever-increasing circles on subsequent frames. The current animation now has a small circle on frame one, growing ever bigger until by frame 20 it should be almost as deep as the screen. Don't be alarmed at how ragged the circle has become, this won't matter.

With the first frame on screen, cut out the 20-frame sequence as an Animbrush. To create an Animbrush, from the Anim/Animbrush pull-down menu select Pick Up. You will now be able to draw out a rectangle on screen which will encompass images over the 20-frame growing circle animation. Remember, while your first circle is small, the last one is much larger, so right from frame one you have to draw out a big enough rectangle to encompass every size in the sequence.



▲ Once you have set up a Range of alternating light and dark colours, use the Contour option in the Fill requester (shown highlighted) to add gradient to the triangular curl. The colours used aren't too critical, as they will be later painted down with a high transparency.

Golden prose...



Red hot reviews

▲ The printed image can't really do justice to the subtlety of this shimmer effect, but you may see the differences in these two frames from an animation which simulates a glowing heat-haze rising from our freshly-cast gold logo. The text was created in a 3D rendering package and you can use any source you like.

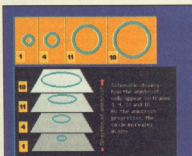
Once DPaint has added 20 cells to the Animbrush (based on the 20 frames of animation), save the Animbrush as it will come in useful for the next tutorial, as well as for your future use.

The next stage is to load in your main image – in this case, the molten gold CU logo. If you load it in to frame one of the sequence, you can quickly use the Anim/Copy command to duplicate it over the

20-frames already created. If you're starting from scratch, load in the image and create a 20 frame animation based on the picture.

Now load in your expanding circle Animbrush (Anim/Animbrush /Load menu selection), and from the Mode menu, select Smear. We're now ready to Animate! This is a method of drawing which uses the contents of the Animbrush over the animation sequence. What we're going to do is move our Animbrush slightly over the 20 frame animation. As it moves frame by frame, it will Smear what's underneath.

It's all taken care of quickly and efficiently by DPaint; select the straight line drawing tool, and place your Animbrush to the left of the screen. Press and hold down the Alt key, and draw out your Animbrush at an angle to the right – any reasonable distance would be from 8 to 12 cms. Now DPaint, using the expanding circles as its basis, smears small areas of the image progressively.



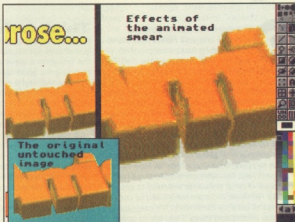
▲ Here's a schematic to explain the construction of the circular Animbrush used for both animation effects this month. Frame by frame the circle enlarges and forms the basis of an Animbrush. When used for painting an Animbrush will cycle through its cells.

Repeat this procedure several times from different starting positions and with different lengths until you're happy with the shimmer. We've used circles as the framework for the smearing and this adds an apparent random factor to the effect,

Golden prose...



Red hot reviews



▲ Here's a magnified view of part of the image, showing the original portion of the letters before the Smear effect was Animatepainted on them. Smear displaces the pixels just enough to give the effect realism.

which is very effective in an animation. I added the supporting text after the Animatepainting so it

wouldn't be affected by the background shimmer. ■
Peter Lee

Ahh ... This would bring a tear to a glass eye



▲ Here's the start and end image of an animation I've created. The main image of the girl has been flipped vertically and a tear added to her face (for extra sympathy ...). The reflection was cut out as a brush and Sheared, then Smearred to simulate a reflection on a liquid surface. Ripples were added to the reflection, and the Animation is complete with the addition of rain falling across the screen, hitting the reflection.

Wired World

PART 7

As good table manners get you far in life, proper etiquette on the 'net will save you from a roasting. Here's our guidelines to keeping the flames at bay.

Out there on the net lie potential enemies and soul mates (see the virtual wedding feature for proof of high romance stakes on the net). To avoid the latter becoming the former, a few lessons in 'netiquette' should be learned.

Sometimes sarcasm, irony and friendly jibes can't be communicated effectively with text alone. This can lead to a great deal of misunderstanding. So, out of necessity, the net community has evolved some systems which help to avoid some of these misunderstandings. The most obvious and useful of these is that experienced net people take 'postings' at face value. You can't read between the lines without further evidence of what the writer intended to get across. 'Smileys' are commonly used to convey feelings to back up comments. It's essential that you understand these if you are to spend any time exchanging E-Mail. See the box out far right for more information about smileys.

Think before you ...

Before you post a message to a newsgroup, you should get acquainted with it first. Read the group for a week before you post anything to it to get a good feel as to what it's about. Ask yourself first whether the thousands of people in the newsgroup would want to read what you write – if not then don't write it. Many newsgroups are ruined by pointless postings known as 'noise'.

If you respond to a post, your mail/news package will load your text editor with a bulk of text from the original message. The plan is to cut out everything from the original that's not relevant to your response and then write your text directly beneath theirs. Misspellings, incorrect text formatting, multiple exclamation marks and other badly formed messages will lead people to see you as a novice or an idiot. It's also bad form to type messages in capitals, as this is regarded as shouting.

Roasted to a crisp

You can get away with virtually anything in private E-Mail. Misunderstandings can be clarified later and the recipient won't expect a masterwork of prose just for a simple private communication. However, when posting a message into a Usenet newsgroup you are broadcasting a message to hundreds and often thousands of other readers. If someone can misinterpret your message, they will. If you've written something offensive expect torrents of abuse ('flames').

If someone does take offence to any of your messages, only reply to correct them factually. Do not reply with a flame in a public newsgroup. Other people don't want to read it so might find yourself roasted to a crisp. If you have something personal to carry on with another user of that group, E-Mail them direct.

E-Mail and newsgroups are great, they enable the World to chat and exchange knowledge on any chosen topic. You can be a part of this too and by following these pointers you can make sure that the experience is a rewarding and positive one. ■

Mat Bettinson

Net abbreviations

Abbreviations are very common in E-Mail, Usenet and the IRC. For anyone who spends a substantial amount of time either reading or writing E-Mail these are a great time saver. Here are some of the most common:

Abbreviation	Meaning
IMHO (IYHO)	In my humble opinion (In your humble opinion)
AFAIK (NAFAIK)	As far as I know (Not as far as I know)
AFAICR	As far as I can remember
ATM	At the moment
FYI	For your information
BTW	By the way
FAQ	Frequently asked question(s)
ROTFL	Rolling on the floor laughing (rolls on the floor...)
RTFM	Read the flipping* manual
WTF	Who/What the flip?*
ICBW	I could be wrong
LCBWS	Late, mate. You might see CUL8R for See you later.
re	IRC speak: Hello again

* In these cases, another four letter 'f' word is often substituted.

Net smileys

Because no expressions of emotion are possible via the text-based electronic media, various moods can be attached to the text by use of 'smileys'. They may not actually be smileys at all (if the expression is not a happy one) but that's the term still used to describe them. To view most of them, turn your head sideways and you can see a face. Here's the basic smiley :-), which means the author is being funny or happy. Eg: "Get lost will you. :-)". On the other hand :-(means the author is sad about what has just been written. Eg: "My hard drive just crashed. :-("

There are many mutant forms. In fact most people make up their own. Here are some of the more common variants:

:) Winking smiley. Open to interpretation. Sometimes people use only this type.
 :-/ Annoyed (usually). Fairly negative.
 :-P Sticking tongue out.
 :-\ Straight faced. Fairly negative though often misconstrued.
 3:-) My own favourite 'devilish' smiley. Mischievous connotations.

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Frequently asked questions

What is multimedia and is it any good on the Amiga? FAQ has the answers.

■ Q. What exactly is multimedia?

■ A. That's a tricky question, but a good definition would be that a multimedia project is a combination of several elements including graphics, animation, video, sound, music and sometimes, although not always, a degree of interactivity.

■ Q. Is it different from other programming?

■ A. There is nothing you can't do with multimedia that you couldn't sit down and create from scratch with a compiler or assembler. However, that's not what multimedia is about: it's the end product which is more important than the tools used to create it. Plus of course, MultiMedia is one of those cute words which can be used to sell otherwise dull PCs because they come with a set of speakers.

■ Q. Is the Amiga a good multimedia platform?

■ A. The Amiga is an excellent multimedia computer. It has built-in sound and music capabilities and excellent graphics: all as standard. It can also be expanded with hard drives, more memory and faster processors for larger projects. More and more users are also buying CD-ROM drives: the ideal platform for multimedia.

■ Q. How can I use it on the Amiga?

■ A. There are many multimedia Authoring packages available. These vary in complexity from the programming language level of Amos or Blitz Basic to the 'point-and-click' level of Optonica's MultiMedia Experience. There are many levels in between. Some are great for video effects (Scala for

example), some are great for writing graphics-based programs (CanDo for example). Some are great at everything.

■ Q. Which should I get?

■ A. That depends on what you want to do. For display or video work, Scala is hard to beat. If you want to create a program which users can interact with, MultiMedia Experience is a good way to get started. If you want to write a graphics adventure, look out for CanDo. A language like Amos or Blitz will provide you with all the routines required to load, display and play images, animations and sounds: but you will need to program the rest yourself.

■ Q. How can I create good 'still' images?

■ A. Good graphics are essential in a multimedia project. You can always draw them yourself in a paint package if you are artistic, but the best source of high-quality images is a flatbed scanner, such as the Epson series which will grab in 24-bit colour and so the results will look excellent in HAM8 mode. Cheaper hand scanners can also give good results and with a little experimentation and with a good source a video digitiser can provide high quality images. There are many CD-ROMs available which contain images that you can use, but you would be lucky to find a disk containing pictures which fit your exact requirements.

■ Q. How can I create moving video?

■ A. Grabbing moving video to add to your project is not easy. The only way to get VHS quality images at the moment is to use MPEG compression but although companies like HiSoft

are developing MPEG decoders (players), encoders are too expensive to use. It is possible to use software to encode images, but the results are poor. MJPEG systems like Motion VLAB will grab moving video and play it back, but specific hardware is required for playback and it's very expensive. Until the cost of playing back moving video is reduced, perhaps the best approach is to use a remotely controlled video record or laserdisk player. A good budget buy is the VideoMaster system for the A1200 which can grab 16 shade mono frames and convert them into standard animation files. These can then be replayed from memory or hard disk.

■ Q. Can I control other equipment remotely?

■ A. Yes: Scala can control plenty of external hardware such as genlocks and Laserdisk players. This allows you to play back video, fade it in and out and overlay Amiga graphics on top. Any ARexx compatible system can be used to control InfraRed Remote Control hardware with add-ons such as InfraRexx from the Aminet

■ Q. Can I add sound to my graphics?

■ A. Certainly: the Amiga is capable of replaying sound samples at the same time as displaying images or animations. Most multimedia Authoring systems will do this quite easily. Some Animation playback systems are also capable of triggering sounds on certain frames: for example, MainActor Broadcast.

■ Q. What about music?

■ A. Due to the popularity of the various MOD files, it's quite straightforward to compose a tune in a program such as OctaMED and then play it back from within the project. Most authoring software can cope with files in several formats. For professional quality

results, you can add a MIDI interface and a MIDI compatible sound source. Example MIDI sound sources include keyboards, but also plain looking boxes – some of which contain several hundred CD quality instruments and drums for less than £200.

■ Q. How can I record work onto video tape?

■ A. You can record it on video tape quite easily – as long as you stick to the standard Amiga video and don't use any DoubleScan modes. The composite video output at the back of the Amiga can be used together with the sound output and connected to a video recorder. You may need a special Scart lead, but these are widely available as many camcorders provide the same output signals. A genlock may give better results, especially as many have SVHS outputs which will record better if you have a SVHS compatible video recorder. Using a genlock such as the GVP model and authoring software such as Scala allows much more control (fading, colour effects and so on).

■ Q. Can I distribute my projects on disk?

■ A. If you write it yourself in Blitz or AMOS or any other programming language, most certainly. Most other authoring systems provide a special 'Player' which can be freely distributed. You must be careful to make sure that you haven't included material which may be copyright.

■ Q. Can I distribute my projects on CD-ROM?

■ A. Yes, but mastering and pressing CD-ROMS is an expensive business. Amiga software is just becoming available, but you might be better asking an existing CD publisher if they would be prepared to take on your work and pay a royalty. **John Kennedy**

Masterclass

Delete your old back-up files and reclaim megabytes of storage on your hard drive.

If you have a hard drive on your Amiga and you run a lot of application software, you will probably soon find that you have collected a large number of files ending in '.bak'. These files are 'back-up' files made when an application saves your work, often it will move the original data to a file adding the ".bak" extension before saving the new data on top.

Although this can be very useful, particularly if you botch something and need to return to a previous version, it can also consume a lot of disk space. Deleting all the back-up files from your system will obviously free-up space but it will also make any defragmenting processes faster and so help speed up your hard drive.

Tracking down and deleting all the back-up files can be a tedious process though. There is always the AmigaDOS DELETE command of course, but it tends to be a bit frightening when used with the ALL keyword. For example:

```
delete dh0: #?.bak ALL
should go through the hard drive
with name 'dh0:' and nuke all the
.bak files, but something like this
scares me silly. If, for example, you
mistakenly typed this instead:
delete dh0: #? ALL
it would delete absolutely everything
from the hard drive in one fell
swoop. And with the AmigaDOS
delete command it is not possible
```

to stop though the files one by one and confirm their deletion.

So to get around this problem we will be creating a program which follows last month's *ARexx* tutorial which searched out and listed duplicates files (rather slowly I know). This will search out and ask nicely before deleting .bak files. It too is written in *ARexx* and it demonstrates some rather tricky features of this powerful language. It also runs quite quickly.

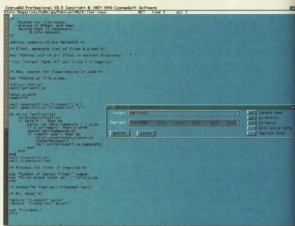
Round 'em up

This month's program will create a list of all the files in the current directory, search out those ending in .bak and then offer a manual or automatic deletion service.

You might be wondering why we don't simply use the LIST command to create a list of all those files ending in .bak. As you can see in the program, we do use the LIST command to generate a list of all the files in the current directory - why not simply extend it to search out the .baks?

Unfortunately this turns out to expose a shortcoming LIST. Although list lformat "hpn %l" all files - t:temptlist will certainly create a list for us containing all the names (and the list is redirected to create a file in RAM), list #?.bak lformat "hpn %l" all files - t:temptlist doesn't work. The wildcard searching abilities of LIST

only operate in the root directory and so the easiest approach is to make a list of ALL the files, and then search through ourselves for those ending in .bak. This is what the second section of the program does: it looks through the filenames and picks out those ending in .bak, placing them in a second file. (All these files are in RAM by the way, to speed up the



▲ Entering a Rexx program requires a text editor: Cygnus Ed or Gold Ed are fine favourites, but you could even use Ed if you had to.

process). Searching for filenames is pretty easy in *ARexx*, because of the long list of string manipulation commands. Here we use RIGHT to check the last four characters in the name.

Then get rid ...

By then the LFORMAT options of the LIST command, we can have exact control over how the file of names we have requested is created. The filename and path are followed by a space and then the file name - see last month's Masterclass for more on LFORMAT and the special attributes you can include.

I have included the filesize so that you could see how much space the .bak files were consuming: it's always nice to be informed you are going to get so many bytes of storage back for free.

There is one snag in that when a file is empty, the size returned was not simply zero bytes, but in fact the word "empty". This is a bit tedious but only needs one extra line: if size='empty' then size=0 to fix it. It also keeps a count of the number of files located because if no .bak files are found it allows us to quickly quit the program without wasting time.

The ProcessFiles() function starts off by asking your permission to delete the files. This

demonstrates how *ARexx* can take input directly from the user as well as from a file. We use the amazingly powerful PARSE command to read a string entered at the keyboard and convert it to upper case to make the test easier.

The testing is done using the SELECT command, which is nothing more than an advanced type of IF/THEN. The SELECT code decides what to do next: choose DELETE by entering D, and the DeleteFiles() function is called. Choose C and the program stops.

DeleteFiles() uses a variation on this theme to discover if the user wants the ability to check each file before deletion. You can see that there is one question outside the main loop and then another inside to check for each file but only if required.

The hard part was actually deleting the file in question. Although it is relatively easy to use any AmigaDOS commands (we used LIST right at the start) it can be more tricky to include a list of arguments. In this case, we want to use the delete command with the path and filename of each .bak file, and unlike the arguments used with LIST, the filenames are not known in advance.

To get around this problem, the

Take heed please

As always, I have tried to test the program as much as I could. I even let it lose on my hard drive and it regain about 2Mb of space for me. However, when using delete in a script you must be very careful! As this program only operates on the current directory (and those directories contained within it) test it first somewhere where it won't do a great deal of harm if it goes horribly wrong - and that doesn't mean on your friends A1200.

The program which will find and help you nuke those pesky baks.

```

Search for file names
ending in #?bak, and then
delete them if necessary.
- John Kennedy
*/

address command /* Use AmigaDOS */

/* First, generate list of files & sizes */

Say "Making list of all files in current directory"

'list lformat "%p\n %l" all files > t:templist'

/* Now, search for those ending in .bak */

Say "Adding up file sizes.."

infile='infile'
outfile='outfile'

total size=0
number=0

call open(outfile,'t:report','w')
call open(infile,'t:templist','r')

do while -eof(infile)
  data=readln(infile)
  if data="" then do
    parse var data filepath " " size
    if size='empty' then size=0
    test=right(filepath,4)
    if (test='.bak') then do
      total size=total size+size
      number=number+1
      call writeln(outfile,filepath)
    end
  end
end
call close(infile)
call close(outfile)

/* Process the files if required */

say "Number of back-up files:" number
say "Drive space taken up: " total size
say

if number->0 then call ProcessFiles()

/* All done: */

'delete "t:report" quiet'
'delete "t:templist" quiet'

say "Finished."
exit

ProcessFiles:

answer=''
do while (answer="D" & answer="C")
  say "[D]elete files or [C]ancel?"
  parse pull answer
  answer=upper(answer)
end

select
  when answer='D' then call DeleteFiles()
  when answer='C' then return
end

return

DeleteFiles:

answer=''
confirm='Y'
do while (answer="A" & answer="C")
  say "Delete [A]ll or [C]onfirm each one?"
  parse pull answer
  answer=upper(answer)
end

call open(infile,'t:report','r')
do n=1 to number
  file=readln(infile)
  data='delete '||d2c(34)||file||d2c(34)

  if (answer="C") then
    do
      confirm=''
      do while (confirm="Y" & confirm="N" & confirm="Q")
        say "Delete " || file || " [Y]es, [N]o, [Q]uit?"
        parse pull confirm
        confirm=upper(confirm)
      end
    end
  end

  if (confirm="Y") then interpret(data)
  if (confirm="Q") then leave

end
call close(infile)
return

```

first stage is to construct the command we need to execute as a single string. Now the filename and path are already in one string, so we only need to join that to a string containing the work 'delete', like this: `delete + path/filename`. Unfortunately, in a real application, this will probably come out as: `"delete work:file1.doc.bak"` and this is not acceptable, in fact, because of the way *ARexx* works this will actually cause the *ARexx* script to fail. What we really want is something more like this:

`delete "work:file1.doc.bak"` so the arguments which follow delete are all contained in quotation marks. This is exactly what the line: `data='delete '||d2c(34)||file||d2c(34)` attempts to do. The string variable called 'data' is assigned to be the work 'Delete', and then joined (using the concatenate command which is two vertical bars) to something called `d2c(34)`. This is joined to the file and pathname and then to another `d2c(34)`.

The magic spell which is

`d2c(34)` is actually an *ARexx* function which returns the character string corresponding to the supplied number. If you know your ASCII codes you will know that for example, the letter A has code 64, an asterisk has 42 and of importance to us in this case, inverted commas has code 34.

This is how the variable 'data' is assigned the string containing the delete command and the necessary arguments. Now all we need to do is get the command executed which is where the

INTERPRET command is used.

INTERPRET is a very cunning *ARexx* command which takes a string and deals with it as though it was an *ARexx* program ... sounds weird I know, but that's how it works. INTERPRET could be used to read in and run an *ARexx* program line by line if that's what you wanted to do with it: in this case, we'll simply pass it the string we went to all the bother of creating and let it get on with it. ■

John Kennedy

Logos, meanings and mysteries:



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We don't make a drama out of a crisis in CU Amiga Magazine. No problem is too big or small. Enough of the clichés, already. Just remember to send in your machine specifications in full as it makes the technical boys at CU Amiga Magazine's life that much easier.



Tony disputed last month's freshfaced description of him. He says he is an old git.



Mat would like also to deny that he is freshfaced cos Q&A has earned him too many worry lines.

CD32 FMV cart



I have been lucky enough to get a full motion video card (FMV) for a CD32. However, I'm having trouble

connecting to my CD32 as it didn't come with an adapter. I know could get a SX-1 module but I my A1200 is all I need. I have asked Silica, Gasteiner, Wang computers, Brian Fowler and a local Amiga repair shop in London for help on this but I've come up against a brick wall. What can I do, please help.

On a different note, are Amiga Technologies going to abandon the CD32 totally or are they or other parties going to make FMV cards for it, as it must be better than the 16-bit Phillips CD-4 system. I'm sure there are plenty of people out there who would want their machines to show CD films.

**Mr K. Walsh,
Bow London.**

Eh? The CD32 FMV cart plugs right into the back of a CD32 (after removing the access panel). No adapter is needed at all. We think you've got an FMV card for some other machine and that's why it doesn't fit. The SX-1 is most certainly not going to help as its pass through is the same gender. I'm surprised you weren't given the low down by the companies that you telephoned.

On the discontinuation of the CD32; it is a tad puzzling that Amiga Technologies did this in light of the machine's success but the reason they gave is that they needed all their resources to get the A1200 back into production and then to develop new machines. Sounds reasonable to us and the CD32 is still essentially an Amiga. When publishers finally realise how many CD-ROMs are out there for Amigas, including CD32s,

we should hopefully see more games released on that format.

Agnus hassle



I am currently studying a City and Guilds TV and video production course at college and use my Amiga

A2000 for a lot of my course work. Recently the opportunity arose to buy a 2.04 Kickstart for my A2000 which I need to run Scale MM300. However, my A2000 only has a 512K Chip mem Agnus. I changed to a 1Mb Agnus but it's still only reading 0.5Mb. I have tried most of the main dealers and repair centres for help but to no avail. They can all tell me how to do it on an A500 but that's no use.

**Derek Bailey,
Upminster Essex.**

The various modifications needed to increase the Chip memory for different revisions of Amiga motherboards has long since faded from the CU Amiga collective genius. Perhaps a reader knows the answer and might like to let us know so we can pass it on?

We do have a solution though, Power Computing's (tel: 01234 273 000) MegaChip is pretty fool proof (price £159). Consisting of a daughter board housing a full 2Mb Agnus and 2Mb of RAM built-in, it's put in place of the old Agnus to get a full 2Mb Chip Memory. There's no further modification needed.

Dodgy CD32



My set up consists of: a CD32, SX-1 revision 2, 4Mb memory, Internal 2.5" 100Mb IDE hard drive, external

Amitec floppy drive and a Phillips monitor. I am using Kickstart 40.60

and Workbench 39.29. When I try to boot up everything is fine for the first three minutes and then it freezes and the CD32 has to be reset. After that the hard drive won't boot up. I tried adding a new Simm and adjusting the Max Transfer Rates to 1xiff but it doesn't make any difference. Now my set up will only work when the hard drive is disconnected and the hard drive will only work when I get rid of the memory chip. Help?

**Duncan Gow,
Helensburgh, Dunbartonshire.**

There's two prime suspects here with CD32 and SX-1 set up. The first is that the CD32 and SX-1 connection is not very solid when a hard drive is fitted. The different pieces of hardware's vibration can cause intermittent connection problems which will cause no end of trouble. To remedy this we use some masking tape to hold the SX-1 firmly in place.

The other culprit is the Max Transfer which with 2.5" HDs is a common enough problem. Try and set Max trans to about 0xiff in the HD toolbox which is 64K at a time. After that, if problems persist, it's possible you have a faulty SX-1. Without a much closer look at your system, it's difficult to tell.

Spanish Amiga



I have an A500 and I'm thinking of buying an A1200. A. Could I run A500 programs like Rainbow Islands,

Super Street Fighter 2, Prince of Persia, Protracker and DPaint III on an A1200?

B. Is the A1200 compatible with the 1084 monitor?

C. Is the A520 modulator used with an A1200?

D. When will the Amiga be available in Spain?

Bartolomeu Barreo Sanchez,
Madrid, Spain.

A. A couple of the games may not though most serious applications will. This is outweighed by the fact that an A1200 has superb games that only work on an A1200 and that the higher spec machine will run things like ProTracker better than your A500 since it has more Chip memory. B. It is, we use them with our A1200s. C. It is but the A1200 has a built-in modulator giving both composite video and RF out. The A520 however, in our experience, provides better quality output.

D. We contacted AT in Spain and they said that the cause for the delay was due to difficulty with Spanish and Portuguese keyboard production. However, these problems have been sorted and the Amiga is now on sale. The distributor in Spain is Pixelmedia, SL, AV Diagonal, 18 ENT, PO Box 398, 34080 Palencia, Spain. Tel: +34 79 700 500, fax: +34 79 700 956.

Adorage blues

As a new Amiga 1200 owner I would ask that you excuse what might appear to be obvious to the more experienced Amiga users. I have prepared the working disc for Adorage (cover disc July 95) and find that all works well with the exception of SSADemo. When I click on this icon, I get the message 'unable to open your tool C:\iconX'. What is going wrong?

Roy Firth,
Halifax, West Yorks.

The SSADemo is what's known as a project. If you click on the icon and then press the Right Amiga button and I (at the same time), you'll see that C:\iconX is present as the 'default tool' in the nice little Icon Information GUI that appears. The problem here is that the program iconX isn't present in the C directory of the disk. Our mistake. The solution is to either copy iconX from the C directory of your Workbench disk to the C directory of the Adorage disk or to simply boot from Workbench, switch disks to Adorage and then click on the icon.

A600 CD-ROM

I have an A600 Amiga which I use primarily for games. I would like to know if it is possible to add on

a CD-ROM drive to play CD games. If so, what will I need, what are the prices and will it all be compatible using a normal TV which does not have a SCart connection, as this is what I use at present. I would rather keep the A600, than have to sell in order to buy something like the Sony PlayStation, Philips CDI etc. Please advise honestly as I am an older user and do not want my living room looking like NASA.

Mary Timms,
Kiddington Oxon.

You can indeed add a CD-ROM via the PCMCIA port on the left of your machine. However, you can't play CD32 games which are the most common form of CD-ROM games on the Amiga. The reason being that your machine doesn't have the newer AGA chip-set that the CD32 and Amiga 1200 possess. To be honest, your best bet is either stick with playing A600 compatible games, like the excellent Worms, or buy an A1200 which has some amazing games of its own. All of which are a hell of a lot cheaper than what you'd have to pay for on other CD consoles.

Crash crash

I am having serious problems with my 1200. It is fitted with a 170Mb hard drive, an Apollo 1230 50MHz accelerator card and 8Mb of fast RAM. It also has a Goliath power supply, a Microvitec 1438 monitor and a Logic 3 speaker set connected to it. The problem is that it keeps crashing continually and reporting eight digit hex error codes. These codes always take the same pattern. The first seven digits are always 8000 000 and are generally followed by a 4 or a 6 (although I have had a 3 and a 8). Every piece of software I try either crashes and reports some variation of this code or just locks up. Even the CD-ROM from the latest edition of your great magazine crashes, as does OctaMED 5.04 which I also obtained from your cover disk. What's causing this?

Robert Coles,
University of East Anglia,
Norwich.

Every month we get a dozen or so letters all stating that their machines crash with those funny hex numbers and asking us why this is so. There's a load of reasons why this could be. Unfortunately the hex numbers in the red Flashing Gurus don't really

Midlands BBS numbers



I have recently bought a 14.4 modem for my 4Mb Amiga. My modem would be a lot of use if you would kindly tell me some BBS numbers that are in the Midlands area. I need to know these numbers to save on cost as I only get a small sum a week.

S. T. Morsons, no address supplied.

You didn't put your address in the letter but here's some BBSes in the Midlands:

BBS	Location	Number
061 For Amiga	Manchester	0161-799-4922
Dox's Amiga	Otley West Yorkshire	01943-850340
Who Dares Wins	Rotherham	01709-587633
Crashes Amiga	St Andrews	01334-479645
Daytona Amiga	Stourbridge W/Midlands	01384-423478
Amiga Phantom	Derby	01332-679873
Frost Free	Huddersfield	01484-842341

tell us anything about what is actually causing the problem. You need some software to patch the OS to get more information. A PD program such as Alert Patch will do the trick. If there's something wrong with your accelerator, this will happen. Even if there's something wrong with your A1200 itself, a crash with the general symptom. It's your Amiga's way of saying it doesn't feel well. Some software diagnostic tools are needed to investigate further as well as systematic removal of all your hardware to track down the problem. We'll look at doing another Amiga troubleshooting guide soon.

A cornucopia of questions



We received a whole stack of questions from Mr Hodgson here's just a few of them.

1. I use MultiCX 2 and want to use ARQ to improve my requester but I am having no luck. One seems to disable the other all of the time. I have seen a screen shot of them working in harmony somewhere, but I am unable to reproduce this at home. How can I do it?
2. Can I use SCSI-2 peripherals like the Zip drive and the Reno CD with the SCSI-1 interface on the A590?
3. If not, are the parallel port drivers available for the Zip drive yet?
4. If I was to use this option, I would need a multiplexer for the parallel port. Is such a device available? (I use a printer on that as well)
5. Opalvision was supposed to become a CDTV style external jobbie as well as a Zorro card. I

was looking forward to that. Will it ever happen?

6. Oh and what exactly is a Torx Driver? Is it a weird Screwdriver?
Oliver Hodgson,
Guildford Surrey

My my, been saving them up have we? Anyway on with the answers:

1. Run ARQ and MultiCX from WbStartup. Click on the ARQ Icon, bring up the Icon information GUI. Insert a tooltip (if not already there) of STARTPRI=100. ARQ needs to run before MultiCX. Then the two will co-exist happily.
2. The actual interface itself is compatible but the driver software in ROM isn't really up to the task I'm afraid.
3. Unfortunately a parallel Zip driver will never happen, the reason being that the Amiga parallel port isn't up to the job compared to the special extended parallel ports on certain PC cards that are needed for those drives.
4. Not an issue because of the above.
5. We don't know but it's highly unlikely since if the Australian developers were going to release that unit, they would have done it well before now. They did produce a product of the type actually before Opalvision called the Colourburst. Our advice is to hang on for a nifty new RGB port graphics enhancer called Graffiti. We should have a review before too long.
6. Yes, you're correct. ■

NO SAES PLEASE

We regret that we cannot respond to readers' queries by post or over the phone. Please do not include stamped addressed envelopes with your letters, as we simply don't have time to answer the thousands we receive. Responses are only possible through the pages of the magazine.

Back chat

Say it like it is folks! Send your gripes, your praise, your opinions to Backchat, CU Amiga Magazine, Priory Court, 30-32 Farringdon lane London EC1R 3AU. E-Mail: Backchat@cu-amiga.demon.co.uk.

Breeding a contender

I wish you would stop saying how technically inferior *Alien Breed 3D* is to *Doom*. This is not true. For a start *AB3D* is a true 3D environment unlike *Doom* which uses a half way system where you can't have rooms above other rooms. Also *Doom*, unlike *AB*, doesn't have proper water effects, they are merely animated textures and you cannot go under the water either. The explosions in *AB3D* are excellent whereas *Doom* doesn't have any at all.

Another advantage is the speed. *Doom* would never run on as fast as a 386 (which is about the same processor speed as an A1200 with fast). Although *Doom* could be considered the better game, the only advantages it has over *AB3D* are higher resolution graphics and the amount of storage space available for them.

AB3D is very good but if the Amiga had a hard-disk as standard then we might see some really good clones. Finally, I invite everyone to join my campaign for a level editor. *AB3D* needs one so desperately, so get onto Team 17 about it!

Jason Frecknall, Mansfield, Notts.

A good samaritan

I'm writing in regards to Mr. Jarvis wanting an all-in-one Mail package, (November backchat). There are several which work either in a UUCP (off-line) type environment or via AmiTCP. Amiga UUCP is very easy to set up and saves a lot on phone costs. It actually turns your Amiga into a Usenet node that just calls up your provider and quickly downloads any new mail/news as well as uploading any news/mail

you have written. Examples of easy-to-use programs are ADMail/ADMan by Simon Brown, (the first is an E-Mail program, while the second is also a threaded news program) or GDMail by Steve Burton. Both use intuition interfaces and are simple to set up and use. There are other options like Thor or even GRN for a newsreader. As well as Amiga versions of the Unix classics Tin and Elm. GRN will also work both under UUCP as well as under AmiTCP. The above programs (with the exception of Amiga UUCP) can be found on all Aminet FTP sites and some are even found on CU Amiga Magazine's November CD-ROM.

Paul Serena, Dutch Amiga Magazine.

Blitz support group

I am trying to put together a Blitz support group and would like interested users of Blitz Basic, to give me some support and ideas. Blitz users interested, can write to me at: 27 Hillside Avenue, Worlingham, Beccles, Suffolk, NR34 7AJ. Please enclose a self addressed stamped envelope if you wish to receive further information.

Matthew Tillett, Suffolk.

I don't like your style

Just a few remarks from across the channel regarding your magazine. Some of these points have been made quite often but I'll just make them anyway. I like the mag but I usually hate the disks. Not just CU Amiga's but other magazines' as well. What do I need three DTP programs, four versions of *OctaMED* and 5,000 Databases for? I buy what I need and I

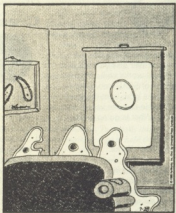
don't like crippled programs or old junk.

With the November '95 issue you really went too far: putting *Audiomaster IV* on the disk! What a nerve! It's a good program, but it's ANCIENT. However, although I now have two copies it was still better than *Virtual Karting*. Let's pray that PC-owners never find out about it or they'll laugh us off the face of the planet. You can't honestly tell me you liked that piece of rubbish. You just put it on because the publisher offered you a deal, didn't you? Don't get me wrong: I like game previews. But only of good games. Not some feeble attempt at a racing game, obviously written in Simon's Basic or Logo or something like that. And I certainly don't like times that cut you off after a few minutes playing.

Instead of choosing a mag that interests me most I now find myself picking the magazine that has the least rubbishy cover disks.

THE FAR SIDE

By GARY LARSON



"No wait! That's not Uncle Floyd! Who is that?
... Crimony, I think it's just an air bubble!"

Team Talk

You know the usual rubbish we write in Team Talk month after month? Well here's more of it. Blah, blah, blah. Read on as each member of the team drives their way through another four weeks' experiences.

Alan Dykes



Between eating sleeping and *Breathless* I haven't had time to sneeze this month, never mind eat. So I'm five stone lighter and need new glasses. But what fun it's been! Things were deadly quiet on the magazine for a change too, it was as if some one had banned Mat and Tony from saying every second word. How very odd.

Lisa Collins



I spent a lot of time playing *Breathless* and *Hillsea Lido* this month. In fact I had to be dragged away screaming from the former. Another real plus point was I made Tony and Mat promise not to swear this month. They didn't manage to last through it all, but it made things a bit more civilised than normal.

Tony Horgan



Swear? I never bloody swear! I swear I don't. I'll tell you something else too, I can't get enough of that *OctaMED* CD reviewed on page 74. It's well known that I've always been a bit partial to this rather excellent music package, but now it's on CD it's like a dream come true. We need more CD products like this and *Personal Suite*!

Be kind to BBSes

What's happened to the support for the Amiga comms scene? I can appreciate that the Internet is a massive success but there is the large number of BBS sites out there whom you seem to have forgotten! Almost all of the public domain sector software that gets reviewed in your magazine has originated from various BBS sites not on the Internet. Granted some new stuff does come from the Internet but the majority of it originates from the private BBS scene. I know as over the last two years in various magazines NFA PD/Productions has had over one hundred reviews.

When you call a private BBS the sysop has control over what files are available. The Internet is running wild with pornography, piracy and files on how to blow off your arms. Once a file is on the Internet it is almost impossible to delete as the file goes to hundreds of sites within a few days. A private system is also used by generally two to three people at any time so the system does not slow down to a snail's pace on Sunday! This however restricts the number of users that can connect in a 24 hour period. But to compensate for this there are hundreds of systems around the world including many eastern block countries.

As far as E-Mail goes the Internet wins hands down, however there are some really good mail networks that connect thousands of users across Europe to name but two "The Missing Link and Fidonet." Most private BBS sites will support one of these networks.

We should like to see a small area in your magazine to advertise BBS sites as we feel very ignored by you. We organise meetings of users and stands at computer fairs, so we do our bit for the Amiga scene!

Well that's enough moaning on I would now like to be blunt and ask for a plug for our UK bulletin boards. All of these sites below (see box out) are open from 8pm to 8am and are mail linked.

All speeds of modem may connect to our sites from 300 bps upwards. We are doing our best to provide a good service to our users and most of us have invested in high powered machines and large storage devices. We leave them running throughout the night for other people to use.

All we want is a little support from the magazines that we buy every month!

Deck the Ripper of NFA, Leicester.

BBSes started the whole comms revolution. Our resident-Comms expert, Mat Bettinson, ran his own BBS for a number of years. CU Amiga Magazine still has a Fidonet presence and you can reach us on the node 2-254/205.0. However, times have changed and the Internet is much more popular as it still gives an Amiga user access to the world for a local phone call. Many different types of Internet access can all be performed simultaneously when linked up.

The hard reality is that people buy modems to get on the Internet and not to call their local BBS. Getting connected to the Internet is a lot harder than using a BBS.

However, BBSes are still very dear to our heart and we promise we'll feature more BBS and Fidonet technology network coverage in the future.

Bugged Out BBS	0116 2375147	NFA Mail Dist Site	14400 bps
Warp Speed	0151 9286610	NFA Tempest Support Site	33600 bps
Rigsbys BBS	0153 0260160	Independent	14400 bps
The Hot Rock	0116 2387710	Independent	14400 bps

I hate paying for disks I'll never look at!

Martin

Netherlands (full name and address withheld at readers' request.)

Martin, we do of course listen to everybody's opinion, but your comments, though obviously heartfelt are hardly constructive. Just where do you think we can get sparkling new software to run on the cover disks while continuing to sell the magazine at a reasonable price? And what sort of damage would we do to the Amiga market if we did? We run "old" software because it's still good, people still want it and companies are willing to sell it to us. Audiomaster is a case in point. It's the best sampler available and we've had great reports from people other than yourself about it. What about Pagestream, DOpus or Image FX. All pretty nice eh?

As for doing a 'deal' with Virtual Karting, just what sort of deal do you have in mind? The game looked promising when we first saw it so we decided

to run a demo of it. Have you seen anything since then in the magazine which implies that any 'deal' was done? I think not, because it didn't happen. We don't like time limited demos either, but for some games they are necessary.

In the final analysis, if what you're saying is that you would like a cheaper magazine with no disks, then say it straight. If enough people wanted this we might be able to do it, but we're not going to drop cover disks for you: too many people like them.

Critical domain

First of all I would like to thank you for a superb magazine. It is one of two that keeps my love for my Amiga alive and kicking. If it wasn't for your magazine we wouldn't have much here in Canada. I have but one gripe with your magazine, and it is a serious one. With dwindling support for the Amiga, and times having been desperate in the past, I think that a little bit more of a constructive review on PD software is necessary.

At times I have found your PD reviews to

be downright rude and demeaning. Come on, give these guys a break, if you keep giving them reviews like that they might just pack it in and head for the PC range. They could be the Amiga programmers of the future, and the saviours of this machine. I know that some of the software that they write is not the greatest. But showing them where improvements can be made instead of making fun of the programs they write may be the difference between the Amiga surviving, or dying. An example is in your November issue. Your review of U Paint 1.80 was uncalled for: "Oh yes, it's on the CD if you want a laugh." Come on, guys restore my faith in your magazine, these guys need help and guidance not to be laughed at!

Carl Raeside, Trenton, Ontario, Canada.
craeside@connect.reach.net

We do all we can to encourage shareware authors, but sometimes the truth must be told. And UPaint was an incredibly underdeveloped program.

Mat Bettinson



Just when I thought I'd seen it all, I was invited to a virtual wedding. People talk about the Internet bringing people together and this illustrates the fact.

It may not be legally binding and they may have spent their honeymoon in a 'virtual Hawaii' but everyone enjoyed it, including me. You may not take it seriously but you should, it happened, it's real.

Helen Danby



I'm really glad that Lisa banned Mat and Tony from swearing this month. It gave me an opportunity to swear myself - and be heard.

Everyone was shocked. They used to think I was so quiet, but it's only because they're so loud. Face it, there's nothing like a bit of loud vocal profanity to accompany a game as viciously good as *Breathless*.

Anthony Collins



I've been getting to grips with *Imagine 3.0* this month. I have to admit I'm a bit of a Mac lad but after Mat and Alan threatened to flush my head

down the toilet unless I tried the Amiga out, I changed my mind. And you know... it's fab! There's nothing like it on the Mac for the price, and it doesn't need a fancy machine to run.

John Kennedy



You know, I write many, many reviews of art packages for CU Amiga Magazine, but yet they still haven't managed to

publish a decent photo of me. My mission over the next few months is to rectify this omission. I'll have to be careful not to let Tony H do any modifications to my new photo though.

Back Issues



OCTOBER 1995

- ON THE DISKS: PageStream 2.2, Exclusive Fears and Citadel demo.
- FEATURES: Using your PageStream cover disk for DTP, Storage: HD's floppies and CD-ROMs, Head to Head Gaming.
- INSIDE: Odyssey, Real 3D v3, PageStream 3.0 and a towering multimedia station reviewed.



NOVEMBER 1995

- ON THE DISKS: AudioMaster IV full program, Virtual Karming demo, CD-ROM edition-Jamset 7 and more.
- FEATURES: CD-ROM definitive guide to drives and disks.
- INSIDE: Cinema 4D, Mac™ Emulation, Final Writer 4, Pinball Mania, Fears and Citadel.



DECEMBER 1995

- ON THE DISKS: Exclusive Worms demo, Amiga E full program plus free Amiga E manual.
- FEATURES: Programming, Amiga music, interview with Ruth Lingford, animator.
- INSIDE: Leading Lap, Worms, Flight of the Amazon Queen, Coala, Dungeon Master II, FinalCalc and Amiga M14385 Monitor.



JANUARY 1996

- ON THE DISKS: Imagine 3.0 full program, ZeeWolf 2 is Alphanumeric.
- FEATURES: 3D rendering using our cover disk, and leading Amiga authorities interviewed.
- INSIDE: Micronik Tower, World Construction Set, Amilink, ZeeWolf 2, SWOS 95/96, Super Tennis Champions and much more.

OCTOBER 1994

- ON THE DISKS: DPaint 5 demo, Realtime Effects Generator 1.5, Stereogram 3D picture maker and Dragonstone demo.
- FEATURE: Storage special.
- INSIDE: Over 50 software and hardware products, Ruff 'n' Tumble, Litol Divil, Detroit reviews.

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DECEMBER 1994

-SOLD OUT

JANUARY 1995

-SOLD OUT

FEBRUARY 1995

-SOLD OUT

MARCH 1995

-SOLD OUT

APRIL 1995

- ON THE DISKS: MovieSetter, clip art and Fila International Soccer demo. PLUS free MovieSetter manual.
- FEATURE: Animation made easy.
- INSIDE: Power CD-ROM, PD Special, ATR, Turbo Trax, Dawn Patrol, Super League Manager, Baldies preview.

MAY 1995

- ON THE DISKS: ProDraw 3 (all non AGA Amigas), OctaMED 6 and Baldies demo.
- FEATURE: Ten printers reviewed, rated and recommended.
- INSIDE: ECTS report, Brutal Preview,

DPaint, Personal Paint, Photogenics and Brilliance compared.

JUNE 1995

- ON THE DISKS: Image FX 1.5 (all Amigas with 2Mb), USM demo.
- FEATURE: Image processing - we show you how it's done!
- INSIDE: RAM speed test: Blizzard 1230 III, Sierra Apollo, Octamed 6 reviewed, Primal Rage, Sensible Golf previewed.

JULY 1995

- ON THE DISKS: Adorager 2.0, Power-base2.4, Arcade Shooter full game.
- FEATURE: Step by step guide to the Net.
- INSIDE: First report from Germany on Escom, LightWave 4 previewed, Cinema 4D, Scala MM400, Vircop and TM2 reviewed.

AUGUST 1995

- ON THE DISKS: Clarissa 2.0 and exclusive demo of Cammy Vs Honda in SSF II.
- FEATURE: Trouble shooting on your Amiga.
- INSIDE: DPaint 5 review, A look at the new A4000/60 with CyberVision graphics, Games include Colonization, Sensible Golf, Time Keepers, Player Manager 2.

SEPTEMBER 1995

- ON THE DISKS: OctaMED 5.04, Sports Legacy, Time Keepers.
- FEATURE: Sex and computers: we take an indepth look at how much there is and what people think about it.
- INSIDE: Alien Breed 3D, Glom, SSFII, Brutal, ViroCop AS06, Base Jumpers CD32.

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Source code: IA1s

Note: Zone 1: Middle East, Africa, USA, South Africa, Hong Kong, Singapore, Pakistan, Indonesia; Zone 2: Australia, China, Japan, Pacific.

**The idea of
Amiga support
has to be sold
once again to
games software
houses,
according to a
hopping mad**

Alan Dykes.

RAMming it home



I got a phone call from a friend in a software house recently. He wanted some advice on machine compatibility. They were considering releasing one of their PC and Mac titles on Amiga and he wanted to know what sort of machine specification would be necessary to sell enough copies to justify the cost of conversion. The A1200 with its AGA chipset was a prerequisite starting point: they haven't produced anything non-256 colour SVGA for three years.

Blameless, he came into the conversation wondering if 4Mb and a hard drive would be a suitable minimum starting point. (STARTING POINT?) And what about CD-ROM? Coming from markets that change constantly, he wasn't to know that the Amiga has been frozen in time, that floppy drive and 2Mb compatibility still needs to be met if you are to achieve a significant sale, even on A1200. This is official policy: the Amiga Magic pack is thus.

Viability

Here we are with a perfectly viable computer which most software houses would be happy to develop for but they won't because it's too much hassle. The simple fact of the matter is that PC software is what sells now. It's what makes people rich, in Britain, in America, Worldwide. And the gap between PC capabilities and Amiga is increasing all the time.

I'm not talking about DOS efficiency, about tidiness, or about what the Amiga is 'capable of doing with a proper, expanded setup. It's the fact that you are now vastly outnumbered by owners with red hot, piping fast, Pentium powered PCs equipped with Quad speed CD-ROM drives and Windows '95. And contrary to Andy Leaning's optimistic assessment Windows '95 is not good for the Amiga.

With DOS and Windows 3.1 things of the past, with Microsoft

themselves slugging them off, almost every single software house in the world is now committed to Windows '95 compatibility. This means that they will be producing for machines with a minimum of 8Mb RAM. And most companies I've spoken to do not envisage ANY products going on sale on floppy disk after mid 1996. CD-ROM will rule. Bill Gates and those too weak or too dumb to stand up to him have pulled off the biggest (and totally legal, I hasten to add) monopoly triumph since God invented air and insisted that we breathe it or die. It is not the PC itself which will marginalise or destroy formats like the Amiga or Macintosh, it's Microsoft. There is no longer any choice, everyone has to be Microsoft compatible.

But I'm getting over excited. There is a choice, and as long as we have cash in our pockets and can decide for ourselves this choice will remain. Apple may be struggling but there are more games being released for the Mac at the moment than the Amiga. The reason for this is that Apple adopted and integrated CD-ROM drives very early. They also have reasonable in-built graphics capabilities and minimum RAM on the Mac is 4Mb, though in the vast majority of cases anything sold from the mid 90s has 8Mb.

With the PC market flooded by publishers and developers and profits squeezed to the pips the Mac is seen as yet another source of income. With the its RAM and peripheral resources it's possible to port a Windows '95 compatible product over and get it running.

Got the power

Here we are sitting in the middle of the biggest upheaval of the Amiga's history, with PowerPC expansion boards being developed by Phase 5 in advance of Amiga Technologies'

own PowerPC machines (see last month's news feature) and a massive range of excellent expansions available. But the games software houses are abandoning us because they think it'll never pay them to convert a PC product. Trying to get it to run on the Amiga's limited resources when it was designed for 66MHz machines with 8Mb RAM and a CD-ROM drive just isn't viable.

Britain has the expertise to produce world class software and a couple of years ago this meant Amiga games. But in the modern global market what Britain wants and what you want is secondary to what the rest of the world needs. A significant majority of the rest of the world wants PC games and we, unfortunately, have to follow them. This doesn't mean that we have to switch to using PCs; they are still wasteful and inefficient. It does mean though that the Amiga's processor, RAM and storage facilities have to keep pace with the PC's.

This isn't just another upgrade plea to you, it's also a plea to Amiga Technologies to realise that they have lost the automatic preference which was given to the Amiga by UK developers in the past. I know for a fact that games will be ported across to Amiga if it has the resources to run them. But they, in co-operation with the various upgrade and peripherals manufacturers have to provide hard proof that there are plenty of upgraded Amigas about and that the next generation will be the business. Amiga Technologies doesn't just need to sell new Amigas to the public, they need to re-sell the Amiga concept to games publishers. ■

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